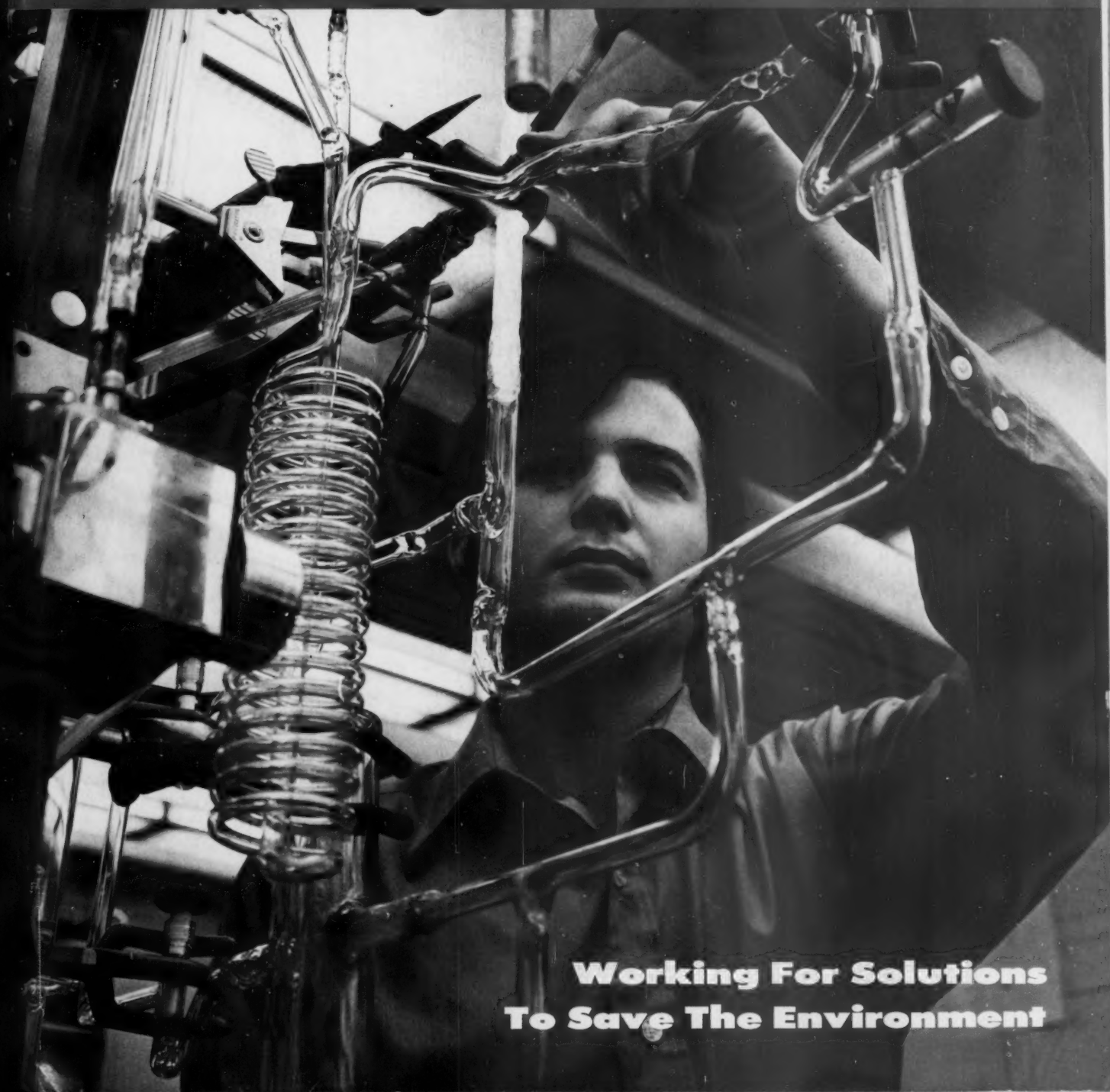
Incorporating International Commerce

APRIL 19, 1971

A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Commerce Today

Coming Developments in Business and Technology



Working For Solutions To Save The Environment

FROM THE SECRETARY

Ombudsman For Business

During the past two years' effort to reinvigorate the Department of Commerce—looking ahead to the day when its full potential would be realized to serve the American enterprise system—three particular points have become clear:

- The Department has many beneficial services available to American businessmen with a broadening scope of concerns and interests;
- Many businessmen, perhaps most, were largely unaware of these services;
- Many who came to Washington, personally or by communication, in search of business assistance became lost, frustrated or disheartened in the maze of bureaucratic agencies and regulations.

Purpose

Recognizing these problems, the Department has now taken what we hope will be a significant step to provide members of the American business community, large and small, with a central office and a high level official to whom they may bring their inquiries, criticisms and suggestions, and obtain information, guidance and assistance on government affairs.

We have created an Ombudsman for Business in the Department of Commerce.

In a memorandum to the President on April 1 outlining this action, I described it as an effort to "reaffirm this Department's role as a place within the Federal Government where businessmen may come" with their problems and their needs, both within and without the Department.

In carrying out his duties, the Ombudsman for Business will not intervene in pending regulatory matters, nor will he become involved in the negotiation of contracts between business and government.

But as the focal point for receiving and handling communications with business, he will be the traffic officer to direct both an incoming flow of requests, complaints, criticisms and suggestions, and an out-going flow of referrals to agencies through the government for businessmen who seek guidance in Washington.

Significance

Creation of the Ombudsman position has the wholehearted support of the United States Chamber of Commerce, the National Association of Manufacturers, and other business organizations with which we have consulted.

To indicate the high significance I attach to this function, in the continued improvement of communication between the businessman and government, I have ordered that the title and functions of the Ombudsman for Business be carried out by a newly created Special Assistant to the Secretary of Commerce.

Last year we launched a successful precursor to this activity, the International Business Assistance Service, which assists the American businessman who must deal with Federal agencies in connection with specific international transactions.

Formalizing this new Ombudsman function, in an office to deal with both domestic and international matters, is an activity which we believe will serve the American business community well, far into the future.

As stated to the President, "I am convinced that business and government will mutually benefit."

Maurice H. Stans

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4 Commerce Scientists Play Many Roles In Environmental Cause
Department expects to make important impact on whole government effort to clean up the nation's environment.

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A Texas town is a good example of this agency's future plans to help communities forestall difficulties that retard future growth.

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More foreign buyers are attending industry expositions in this country as Commerce steps up its publicity and services abroad.

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63 New Publications

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DICK EVANS
Editor

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Associate Editor, International Commerce

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ARTHUR McDERMOTT
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AMERICO A. W. FAVALE
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ECONOMIC
HIGHLIGHTS

First Quarter Advance Led By Autos, Steel; Upswing Spreading To Other Major Sectors

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).

Large increases in automobile and steel production, along with strong gains in housing and state and local government spending, were mainly responsible for the massive increase in Gross National Product in the first quarter. The upswing is now spreading to other sectors of the economy, and a more balanced expansion is in prospect for the remainder of the year.

The percentage increase in GNP in the first quarter was the largest in several years, both in current dollars and after adjustment for price changes. Charts on the opposite page show the sharp gain in auto sales following the strike, and the sharp gain in steel production which reflects, in addition, the possibility of a strike in that industry this summer. Both autos and steel contributed a disproportionate share to the increase in GNP. The automotive sector, including related materials, supplies and services, accounted for about $20 billion, or about two thirds, of the increase.

The other two big contributors to the first quarter gain in GNP—housing and state and local government spending—owe their recent strength primarily to the greatly improved conditions in the financial markets and the reductions in interest rates.

In the current quarter, steel will continue to add considerable stimulus as steel users build inventories further, and auto production is expected to remain at high levels. In other manufacturing industries, the rise in backlogs of unfilled orders in recent months suggests that production will be on the upbeat.

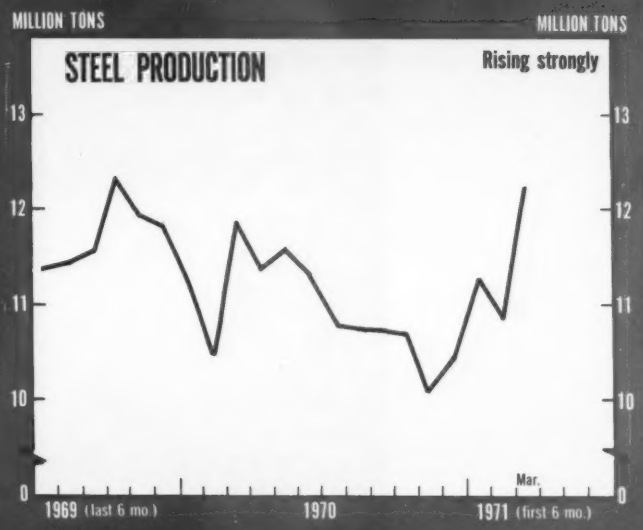
Further strong gains, in this quarter and beyond, are likely in housing and in state and local government spending in view of the continued ease in financial conditions. Moreover, capital spending is again on the upgrade, as indicated by the latest survey of capital spending plans and the recent strength in contracts and orders for plant and equipment.

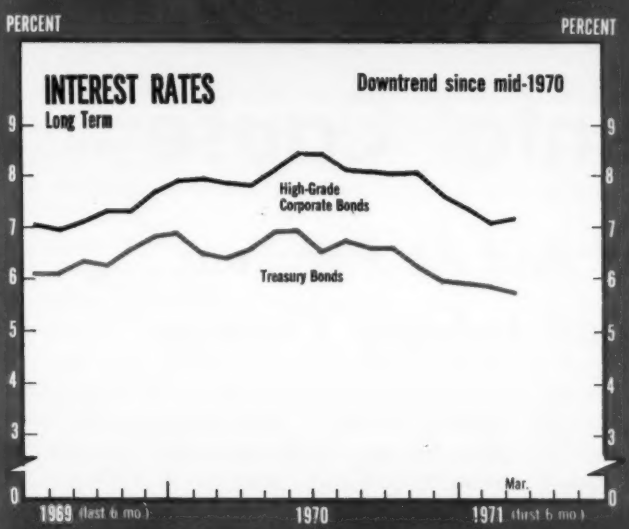
Consumer spending, which is the largest segment of GNP, is still low in relation to the amount of spendable income available to the public. There have, however, been steady gains in consumer spending recently, with retail sales, spurred by autos, increasing every month since November. In addition, spending for consumer services continues to gain rapidly.

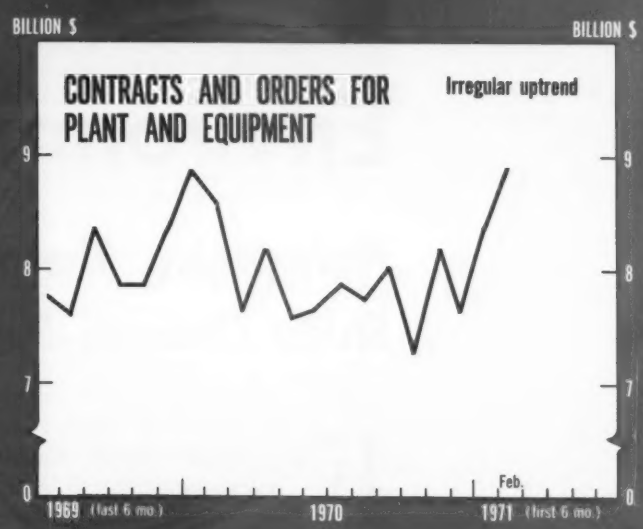
A strong and balanced economic expansion for the remainder of 1971 clearly requires a vigorous uptrend in consumer spending. Thus, several recent developments on the consumer front are highly significant for the economy as a whole. Pre-Easter sales showed an improved tone. The rising trend of residential construction augurs well for sales of household durables. More generally, most measures of consumer attitudes and spending plans indicate a turn for the better.

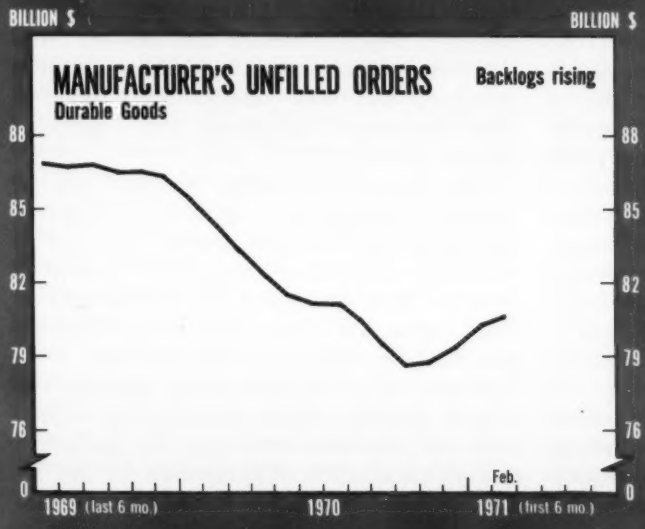
The continuing economic expansion will bring a downtrend in the unemployment rate, which was about unchanged on average from the fourth quarter of 1970 to the first quarter of 1971.

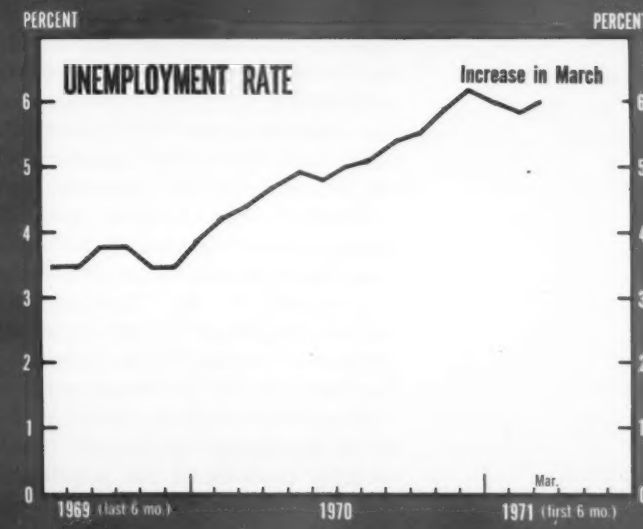
Latest Indicators











*Annual rates
All data seasonally adjusted except interest rates and steel production

Commerce Today
April 19, 1971
Vol. I, No. 14

Commerce Scientists Play Many Roles In Environmental Cause

Fight Noise, Thermal And Air Pollution; Study Oceans, Support Industry Cleanup

Environment 1971. Department of Commerce scientists and engineers are working on environmental tasks around the world.

It's a little understood aspect of ecological cleanup, but the capability to improve the environment rests with the development and application of science and technology. One of the greatest reservoirs of such S&T (with clear channels to business and industry) is the Department of Commerce.

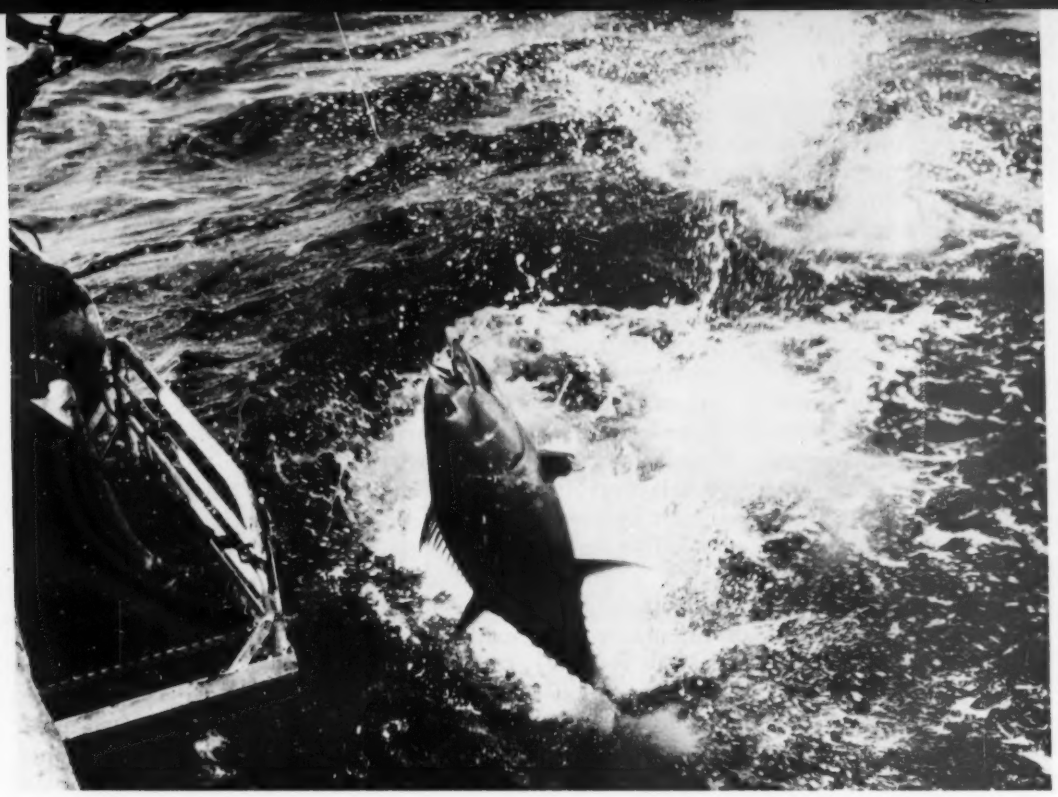
Strangely, in decades past there was greater application of that interdependence than there seems to be today. Yet since the establishment of the "Department of Commerce and Labor" in 1903, measuring environmental conditions has been a continuous responsibility of the Department.

Tomorrow the Department will meet ever more demanding challenges. The Secretary recently established the position of Deputy Assistant Secretary for Environmental Affairs, to help assure that the Department meets its responsibilities.

A major part of the Department's environmental effort is lodged within the National Oceanic and Atmospheric Administration (NOAA), created last October from the former Environmental Science Services Adminstration and various other government agencies concerned with environmental affairs.

The National Weather Service, one of NOAA's component agencies formerly known as the Weather Bureau, has special teams for predicting air pollution potential in cities. Now there are six such teams—in Washington, D.C., New York City, Philadelphia, Chicago, St. Louis and Cleveland.

Their job is not actually to measure the amount and kind of air pollution but to predict when the climate is right for the pollution to accumulate. Weathermen do this by scanning advancing air masses for telltale



A GREAT CATCH—*But the nationwide scare about mercury-contaminated tuna and other fish has resulted in intensified efforts by the National Oceanic and Atmospheric Administration to determine the nature and extent of many kinds of heavy metal contamination in different fish. It is important to know how these contaminants enter and move through marine life so as to reduce their presence.*

signs of prolonged stagnation over major cities particularly on extremely sluggish conditions brought on by a temperature inversion.

A layer of warm air over cooler air below acts as a lid preventing the escape of pollutants and concentrations build to troublesome levels. If the forecaster can spot such a possibility in advance, then he can warn federal, state and local officials in ample time for appropriate action. Sources of pollution may be dampened or extinguished, temporarily. People with chronic heart or lung conditions can be warned to stay indoors until the poisonous air is dispersed.

Weather analysts at the National Meteorological Center near Washington, D.C., use computerized techniques to forecast large areas of the country where stagnant conditions may develop. This type of prediction service has been continuing since 1960.

Since 1969, these Environmental Meteorological Support Units (EMSU) teams have taken the large-scale forecasts of pollution potential and tailored them to fit their particular cities. Special daily studies of the air over their cities are made with instruments attached to balloons that radio back detailed data on wind, humidity, and temperature. Combining this profile of the atmosphere with information on coming weather, the EMSUs provide daily outlooks of how well their city's pollution will be dispersed. This information is transmitted to all pollution-control agencies within the Air Quality Control Regions in which the EMSUs are located.

The National Weather Service plans to have 26 EMSU's scattered among the nation's 300 Air Quality Control Regions by 1974. Most of these will be in urban areas, but there also will be some in rural regions. In the western states of Oregon and Washington, where the burning of rubble from lumbering operations creates smog in the valleys, timely warnings can enable lumbermen to burn rubbish only when cleansing breezes are fresh and strong. Burning of agricultural waste in the valleys of California and in the marshlands of eastern Texas also can be geared to periods when air circulation is vigorous.

The ultimate goal is to have the Environmental Meteorological Support Units and the various air-pollution control agencies so closely tuned to what is happening to the air that the quality can be regulated on a day-to-day basis.

Created in 1970 by the President, the Na-

tional Industrial Pollution Control Council advises the Administration on environmental quality improvement policies and programs affecting industry. Located in the Commerce Department, the Council provides voluntary action program leadership in pollution clean-up by industry. The Council and its sub-councils are composed of 228 top executives drawn from all sections of the nation's industry.

To date, the Council has produced 23 reports describing specific pollution problems and summarizing clean-up progress by industry. An industry commitment book released by the Council earlier this year includes a compilation of commitments entered into by 160 companies on definite time schedules.

In the measurement of air pollution, Commerce's National Bureau of Standards has instituted what it calls a "Measures for Air Quality" program. NBS' role includes development of standard reference materials and devices for the calibration of existing and future air pollution measurement instruments. Advancement of measurement science is to be concentrated in those areas of direct relevance to air pollution problems.

POLLUTION PREDICTION—*A meteorologist of NOAA's National Weather Service checks his charts and maps to predict when the climate is right for air pollution to accumulate. Advancing air masses are scanned for telltale signs of prolonged stagnation.*

NBS is developing better methods to measure the size and composition of solid particles or liquid droplets suspended in air to trace the chemical reactions of pollutants in the atmosphere, and to provide faster, simpler, and more accurate methods for measuring the concentration and nature of gaseous pollutants in the air.

This work is coordinated with activities of the Air Pollution Control Office of the Environmental Protection Agency.

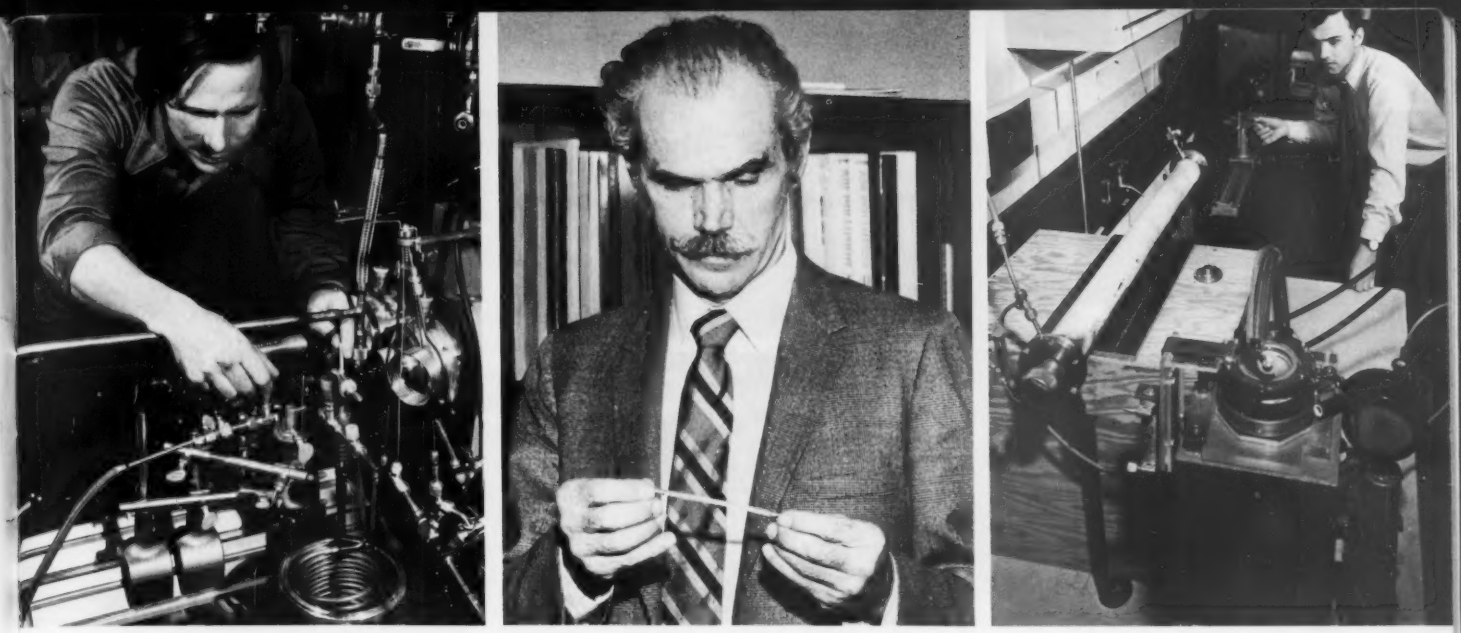
Earlier this year, the Bureau of Standards certified a sulfur dioxide permeation tube developed by EPA's Air Pollution Control Office. This little pencil-shaped plastic tube makes possible the accurate determination of sulfur dioxide in air. Users of gaseous pollution measuring instruments can calibrate their instruments against this standard tube in order to achieve uniform and just enforcement of legal maximum concentrations that are being established under legislation to control major air pollutants.

A nitrogen dioxide permeation tube is also being investigated and other devices are being explored for their applicability to ozone, formaldehyde and propane monitoring. The Bureau is also developing an atomic emission detector for absolute calibration of air pollution monitoring devices for sulfur compounds. Chemical composition of particulates, too, is sought under the NBS program. To date, less than half the constituents of particulates have been accounted for in typical urban samples.

A study of where best to locate air pollution sensor devices is also under way at the Bureau which expects soon to establish its own air sampling station at the Gaithersburg, Md., headquarters laboratory complex. Bureau scientists will launch a series of direct experiments on sampling.

The part that automobiles play in air pollution has been tackled by a special panel established by the Commerce Technical Advisory Board which advises Secretary Stans. This Board, headed by the Assistant Secretary of Commerce for Science and Technology, and made up of leading scientists, engineers, corporate executives, and educators, has in recent years expanded its interests to include problems of broad national interest beyond those which are the sole responsibility of the Commerce Department.

Early this month the Board sent the Secretary the final report of its Panel on Automotive Fuels and Air Pollution. That report



POLLUTION DETECTION—*Dr. Walter Braun (left), a National Bureau of Standards scientist, uses a vacuum ultraviolet atomic emission detector designed for absolute calibration of air pollution monitoring devices. Dr. John T. Middleton (center), head of the Environmental Protection Agency's Air Pollution Control Office, examines a sulfur dioxide permeation tube developed by that organization and certified by NBS to accurately determine sulfur dioxide in air. At right, Dr. Christer Hellner, of NBS, analyzes air pollution photochemistry by means of sophisticated laboratory instruments.*

concludes that unleaded, low-octane fuel can be produced for new vehicles without major dislocations in the petroleum refinery industry.

It calls for legislation to establish the authority of the Federal Government to regulate automotive fuel additives and components as part of the National Automotive Emissions Control Program. Such regulatory power should be granted to the Administrator of the Environmental Protection Agency, the report concludes.

The panel also recommends that automobile manufacturers announce publicly at least a four-year moratorium on increases in engine octane requirements starting in 1971. Among recommendations, the panel calls for regulations to provide for nationwide availability of at least one grade of low-leaded fuel no later than the end of 1972 and at least one grade of unleaded, low octane gasoline by July 1, 1974.

In the area of water quality improvement, NOAA is involved in a major fact-finding effort to support Great Lakes restoration—a project known as the International Field Year for the Great Lakes. This is a joint U.S.-Canadian venture affecting about 35 million citizens of both countries who inhabit the drainage basin of the Great Lakes-St. Lawrence River system. It is estimated that 44 million people will live along these inland seas by 1980.

Singling out Lake Ontario as the model for this investigation, IFYGL will instrument the lake measuring what goes in, what comes out, how lake waters, and their pollutants, circulate, and how chemical and biological characteristics of the lake change in response to those factors and to seasonal variations.

Lake data will be collected by means of a network of towers and buoys emplaced in nearshore and offshore areas of Lake Ontario, research ships and aircraft and shoreline meteorological stations.

In addition to NOAA personnel, participants in this international program will include representatives of U.S. and Canadian universities, other government agencies and private industry.

As part of its involvement in the intergovernmental Marine Environmental Prediction (MAREP) Service, NOAA's National Ocean Survey is conducting a pilot study of the estuarine circulation in the Penobscot Bay of Maine. This is part of a study program to develop predictions of the flushing rate of estuarine waters.

Research leading to an understanding of the diverse physical processes that operate in the estuaries and coastal zone is being conducted by NOAA's Atlantic Oceanographic and Meteorological Laboratories in Miami.

The Sandy Hook, N.J., Sport Fisheries Marine Laboratory of NOAA's National

HEALTHY APPETITE FOR STEEL—*In a short time, a junk car can be reduced to flat steel plate in machinery like this. The Bureau of Domestic Commerce's Metals and Minerals Division is working with the Environmental Protection Agency to further Federal action on disposal of junk cars and other solid waste in order to clean up the landscape.*

Marine Fisheries Service is investigating sublethal effects of thermal additions on marine ecosystems, the effects of temperature on fish spawning and on activity rhythms.

Under the same MAREP program, the Marine Minerals Technology Center of NOAA is conducting research to develop prediction techniques to assess the probable effects of marine mining on the environment. Such a capability will provide the technical foundation to establish guidelines for operational criteria and to recommend regulations for offshore mining.

NOAA is intensifying its efforts to determine the nature and extent of many kinds of heavy metal contamination in fish found in coastal and offshore waters. A survey of major commercial and sport species supplied from commercial boats and NOAA research vessels is underway. Initially investigators are checking for mercury but other heavy metals are also to be checked. An initial screening survey of more than 30 fishery products by NOAA's National Marine Fisheries Service scientists has already shown that nearly all of 200 samples of commercially important fish products have tested well below Food and Drug Administration guidelines of .5 parts per million of mercury.

Tests have also been run on frozen fish blocks, a source for such popular convenience products as fish sticks, fish portions, fish cakes and fish for TV dinners.

These programs are expected to provide better insight into the contaminant problem than presently available. It is in the coastal zone where this problem must be stopped first, and that means wise management of coastal areas.

However, it is not enough to know that certain ocean fish carry heavy metals. It is important to know how these contaminants enter and move through the marine ecosystem, a much larger question.

Commerce's Maritime Administration, meanwhile, has launched a year-long study that could be the first step in the construction of multipurpose offshore terminals around the U.S. This is expected to be a major factor in eliminating the possibility of thermal pollution of bays and rivers by nuclear power plants, since these could be located on the terminal island where generated heat could be dissipated in the ocean. They could also serve as receptacles for solid waste sewage, which could be used as fill for the offshore facility. It would reduce the danger of oil pollution by ending the necessity for large tankers to transit narrow waterways, thus running the risk of grounding or collision and by being designed for the efficient recovery of oil accidentally discharged into the water at the terminal.

The Maritime Administration has also initiated an Oil Spill Action Plan to eliminate accidental or intentional discharge of oil into the ocean, hopefully by 1975, but not later than 1980.

Noise pollution is another important aspect of the general environmental problem. To understand the harmful effect of noise on people and how to control it, noise must be measurable. At the National Bureau of Standards, where noise research has been continuing for a number of years, acoustical experts are involved in a research and development program to establish standards and tests for the reduction of noise in buildings.

The research covers the physical distribution of sound in and around buildings and the effect of the sound on the occupants. It is part of the Bureau's response to recommendations made by the Subcommittee on

Noise of the President's Cabinet Committee on the Environment. This program is intended to complement other agency programs by providing the measurement methods and information base needed by other Federal agencies and by state and local governments to permit rational establishment and uniform enforcement of regulations for noise control in buildings.

The Bureau is also involved in a cooperative study with a private industrial association to investigate the acoustical properties of doors and windows. Since these constitute the major means by which outside noises enter buildings, the data will be valuable to architects and builders in improving the soundproofing of homes, schools, hospitals, and office buildings.

A panel on Noise Abatement established by the Commerce Technical Advisory Board recommended in a report issued last month that an office of noise abatement should be established in the Environmental Protection Agency. The panel also urged state and local governments to designate an office to deal with industry, the public and the Federal Government on noise matters and to consider the social and economic impacts of noise in regional and urban planning. It called for more research in the field and supported additional training of personnel in noise work.

Hearing damage

Millions of workers are now exposed to noise levels that have been shown conclusively to produce hearing damage, the report stated. The panel concluded that the most serious impediments to effective noise abatement and control are social, political, legal, and economic, rather than technological. It also found that there is a shortage of personnel trained in acoustical engineering and noise control and consequently, that much of the large body of available scientific knowledge is not being effectively applied.

To inspire the nation's inventors to come up with more devices and methods for curbing environmental pollution, Commerce's Patent Office has established, at the direction of the President, a priority processing procedure to expedite applications for these types of patents.

Since the establishment of the program in February 1970, some 400 applications have been given immediate attention. This means that an individual filing for an anti-pollution patent can now expect to have his application processed in six to eight months rather than two years or more required for the average patent.

Another Commerce agency, the Bureau of Domestic Commerce, is concerned with solid waste disposal, recycling and air pollution. With the Environmental Protection Agency, BDC's Metals and Minerals Division is working to further Federal action on junk cars and other solid waste disposal.

Market advice is provided by BDC to the Maritime Administration and the Defense Supply Agency to help them arrive at a joint disposal plan for merchant and naval vessels.

Currently the agency is reviewing the air pollution situation in copper and other nonferrous metal smelters with particular reference to sulfur oxide emissions and the economics of sulfur disposal.

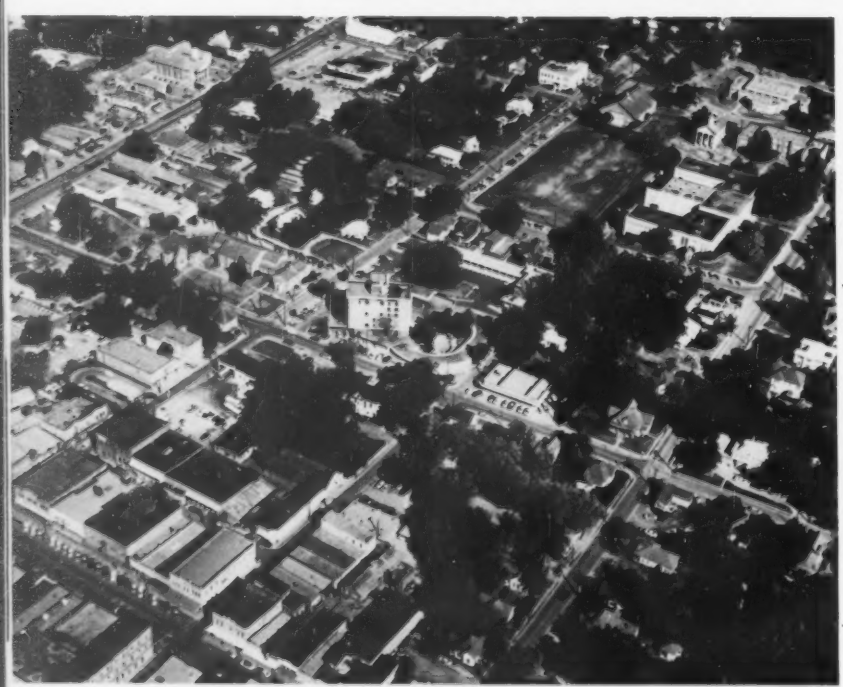
Commerce's Economic Development Administration has established procedures to evaluate projects to be funded under the Public Works and Economic Development Act in order to determine if they will significantly affect the quality of the environment.

Together, all of these environmental programs and activities implemented by the Department can be expected to make an important impact on the total governmental effort to rid the nation of pollution in all its invidious forms.

WHAT WILL HE INHERIT?—*An oil-smothered turtle disturbs a boy along a stretch of Virginia beach marred by ugly oil-smudged tidelines. The Maritime Administration has an Oil Spill Action Plan to prevent this happening in the future.*

EDA Gives New Lease To Water-Short Cities

Texas Town Is Example Of Agency's Future Plans



FLAT AND DRY—*Nacogdoches will get EDA grant for water project to help maintain the strong growth surge which local efforts produced in the past decade.*

At times a single project may give a community or an area a new lease on life for additional growth, or forestall difficulties that would retard future growth. Such a case may be found in the small city of Nacogdoches, Tex., which discovered that it needed a new source of water to meet growing community and industrial demands.

The city concluded, after investigation of the problem, it would need financial assistance to provide the new water source. It asked Commerce's Economic Development Administration for a public works grant to help finance the project. The EDA, after finding the necessary requirements had been met, approved an award of $3,032,000 to defray half the cost of the new waterworks system. The city will put up the other half.

The $6,064,000 will be used to build a dam, reservoir, pumping facilities, treatment plant, water supply line, water storage tank, and other necessary works. The dam will be built across the Loco Bayou (creek) at a point about seven miles east-southeast of Nacogdoches. Local officials say the project will provide the city with an adequate water

NEW FACE OF NACOGDOCHES—*Modern dormitories have risen at Stephen F. Austin State University.*

supply for future needs and assure continued industrial development in the area.

Announcing approval of the EDA grant, Robert A. Podesta, Assistant Secretary of Commerce for Economic Development, said: "This project is vital to the economic health of Nacogdoches and the Deep East District (the Deep East Texas Economic Development District). We are happy to take part in it, especially because of the progress which the citizens of Nacogdoches have made in recent years."

One of many

The Nacogdoches project is one of nearly 2,000 approved for EDA assistance since the agency began operations September 1, 1965. The total amount of aid approved exceeds one billion dollars. Construction has been completed on 1,005 of the projects for which assistance has been awarded, and 482 others were under construction as of mid-March.

The vast majority of the grants approved have been for water and sewer projects and sewage treatment facilities. Other projects for which funds have been alloted include in-

TRADITIONAL TEXAS ACTIVITY—*Beef cattle industry is expanding rapidly in Nacogdoches helping to give the growing county top rank in farm income.*

dustrial park developments; waste treatment plants; hospitals; port facilities to expand industry; industrial streets; access and some other roads, not included in Federal-aid highway programs, designed to promote economic expansion; regional airports, runways and other improvements; training centers for unemployed or partially employed adults; some research facilities related to industrial development; tourism projects under certain circumstances; community and recreational facilities; technical-vocational schools, and many others.

EDA also has a list of don'ts. For example, it does not provide assistance to projects that would compete with an existing privately owned public utility; projects that would increase production of goods, materials, and commodities when available capacity exists to meet demands; projects intended to aid in the transfer of industries and jobs from one place to another.

To be eligible for aid, projects must be located in areas designated by the EDA, and must be consistent with an approved Overall Economic Development Program. Certain specific standards must be met relating to greater-than-average unemployment, low family income, or large population losses. In some cases, aid is given to growth centers that offer the prospect of preventing the outward migration of people.

Nacogdoches is part of the Nacogdoches-Lufkin-Diboll growth center for the Deep East Texas District. This is a multi-county organization working to promote economic and social growth throughout the area.

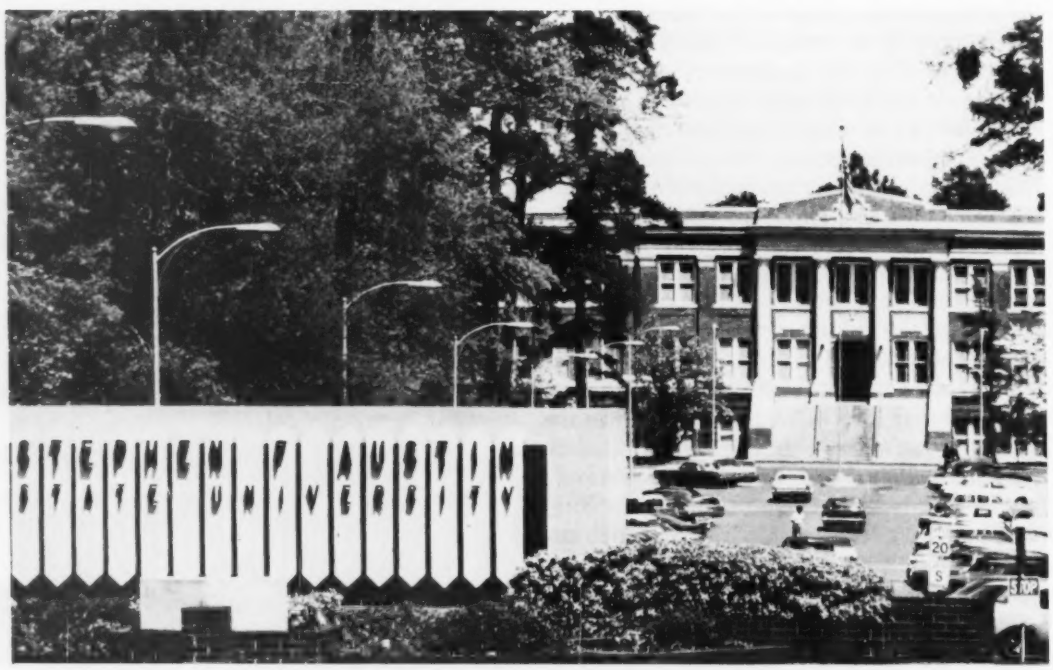
Since Nacogdoches has been growing in recent years, it has provided more opportunities for jobs that would keep people in or near their own localities, serving to check migration of people to more populous centers where some of them, finding no opportunities, swell the welfare rolls.

A number of counties in the surrounding East Texas area have lost large numbers of people through migration to other places. Local officials say that opportunities afforded by Nacogdoches in recent years have induced a number of people, who had gone elsewhere, to return.

The population of Nacogdoches increased little from 1950 to 1960—remaining at a level of more than 12,000. But the 1970 count showed a population of 22,544, almost double the total 10 years earlier. The population of Lufkin increased from 17,641 to 23,049 in the decade, and that of Diboll from 4,374 to 5,133.

Population helped by college

Local citizens say a primary reason for the big rise in the population of Nacogdoches during the decade was the soaring enrollment



BIG GROWTH FACTOR—*Soaring enrollment at Stephen F. Austin, from 2,054 in 1960 to 9,614 in 1970, has been a key element in Nacogdoches' overall expansion during the decade of the 1960s.*

RESTORING RESOURCES—*Helping to guarantee the continued growth of Nacogdoches' leading industry, the manufacture of pine forest products, pine seedlings are planted with the aid of machinery.*

in the Stephen F. Austin State College, said to be the fastest-growing State-supported college in Texas. Named for the founder of the first Anglo-American colony in Texas, and one of the famed heroes of Texas history, the college contains the State School of Forestry. Local residents suggest that a quiet environment in a less populous area, a beautiful campus, and a greater number of courses designed to aid East Texas students, are among the reasons why the college enrollment jumped from 2,054 in 1960 to 9,614 in 1970.

In 1970, about 4,000 of the college students, according to local officials, were counted in the population as residents. The rise in enrollment required more instructors, of course, and also brought a number of other people to Nacogdoches.

In addition, various industrial facilities were attracted to the city. The International Paper Company established in Nacogdoches a plywood mill which employs several hundred people, about half of them in the mill and half in the nearby forests.

Nacogdoches is located in the great pine forest area of East Texas. Its major industries, therefore, include forest products, such as lumber, and tree farming, in which the tree growth is cut clean and the land replanted with trees started in nurseries.

Among other major industries are dairying and beef cattle, and poultry.

Nacogdoches once boasted that it was the "watermelon capital of the world," but no more. The surrounding area found that growing other things was more profitable and less trouble.

There are a number of manufacturing establishments in Nacogdoches. Aside from forest products, they turn out chicken coops, processed poultry, candy, aluminum lawn furniture, brass valves, feed and fertilizer, business forms, and clay products. There is also a ladies' dress manufacturer.

Promising local growth

The local growth, and the attendant opportunities, did not develop without activity on the part of the city. Local officials point

THE MOVING SPIRITS—*Nacogdoches' recent progress has been spurred by the activity of local officials, including from left: consulting engineer George J. Schaumburg, city commissioners A. L. Mangham, Roy Blake and Victor Bobo, Mayor R. G. Muckleroy, Jr., and city commissioner Neil Todd.*

out that the Nacogdoches growth center has carried out a number of projects for the benefit of its citizens and those of adjacent areas.

Among these are:

- Paving 50 streets in all areas of the city at a cost of about $2,000,000, including the widening of highways into the city.
- Spending $2,604,410 on water improvements and $2,077,562 on sewer improvements.
- Implementing a flood control project.
- Enlarging the local hospital.
- Adopting the Southern Standard Building Code.
- Constructing a new administration building at the Del Rentzel Airport and improving the runways.
- Assisting a rent-supplement housing project designed to house 300 persons who had been living in dilapidated dwellings.
- Developing a 32-acre recreational center with three pavilions.
- Purchasing a 30-acre park to accommodate five baseball diamonds.

For many years, Nacogdoches had depended upon deep wells for its water needs. But one of the projects which it initiated, a water study conducted by hydrologists, indicated that within three years the water supply from the wells would prove inadequate. It was shown that the city of Lufkin, and a paper mill located in a nearby county, were pulling water from the same sands. With increasing water requirements, the entire process was headed toward a condition of diminishing returns from the wells. Acting on the premise that to be forewarned is to be forearmed, Nacogdoches developed the Loco Bayou project, which the EDA has now approved.

Local officials say the new water project will permit the creation of several hundred new jobs, some in the near future and some later. They explain that, among others, the International Paper Company expects to add 235 jobs, and the Texas Farm Products Company 100 jobs.

Nacogdoches affords one of many examples of how local initiative and effort, with the Federal Government acting as a partner, can move to the solution before the problem becomes critical.

—*Economic Development Administration*

Trade Shows In U. S. Gain As Export Tool

More Foreign Buyers Attend Industry Expositions; Commerce Offers Publicity And Services Abroad

At Chicago's International Amphitheatre, where the language along the crowded exhibit aisles is that of machinery specs, a German or Italian accent no longer draws surprise. At the Coliseum in New York there are clusters of Japanese, catalogs in hand. At the Miami Beach Convention Hall the frequent salutation is "Senor."

Increasingly, trade shows across the U.S. are going international. The trend is welcome —it brings good results in manufacturers' export sales ledgers and in the U.S. national balance of payments account.

The Department of Commerce is gearing up to add further momentum to this trend and to extract the full beneficial impact from it. It has now combined into one program a number of services that touch on worldwide aspects of U.S. commercial expositions:

► An international alerting network, through information available at nearly 300 U.S. Embassies and Consulates, that advises executives abroad about the dates, places, and product displays at the major U.S. shows.

► Assistance by this same worldwide network of U.S. Foreign Service officers in publicizing overseas the American expositions.

► Cooperation with U.S. trade associations and other show sponsors in long-range exhibition planning to build up appeal for the foreign visitor.

► Cooperation with sponsors on attractive seminars and symposiums to bolster show impact on foreign visitors.

► Attendance of Commerce Department specialists at selected shows, to assist foreign buyers.

► Services of these specialists—and those from other Federal agencies such as the Eximbank—in arranging credit or loan guarantees for exporting firms.

► Follow-up services by Commerce Field

For additional information on industry expositions in the United States, write: Domestic Trade Fairs and Expositions Staff, BDC-180, U.S. Department of Commerce, Washington, D.C. 20230; phone, 202—967-5676.

PACKAGING HAS UNIVERSAL APPEAL—*The show of the Packaging Machinery Manufacturers Institute, formerly a biennial event, is now going annual. The Institute is adding an international lounge and arranging a series of seminars to build on the show's appeal for overseas visitors.*

Office specialists when foreign visitors stop at plants across the U.S. to make further purchasing inquiries.

► Assistance to show sponsors in arranging duty-free entry of foreign exhibit items.

Demand for such assistance is underscored by many U.S. show sponsors.

The American Textile Machinery Association, for example, which sponsors a quadrennial exposition in this country, says: "Each show surpasses its predecessor in foreign interest." In 1960, the Association points out, 1,412 visitors of a total attendance of about 17,000 were textile mill executives from 46 countries; in 1969, attendance had grown to 3,324 executives from 57 countries, out of the total attendance of 32,000.

The Association has already found Commerce Department assistance beneficial, both abroad before the event and at home during the fair.

An Association official explained it in detail: "ATMA is indebted to Commerce for help in overseas promotion of this event through Embassies and Consulates. The cost of mounting a similar promotion campaign ourselves would be prohibitive. The Commerce booth at the exposition lends credibility and prestige. The expertise of the Commerce textile industry specialist was an effective contribution. And certification is very helpful in giving the exhibition an international flavor." ATMA has already received certification for its 1973 show, in Greenville, S.C., and exhibit space has been sold out.

The Packaging Machinery Manufacturers Institute sponsors a show that, formerly biennial, has just become an annual event. An institute spokesman said: "In our 1969 show, we had over a thousand foreign visitors. We hope to build on that figure this year, and will provide special facilities—including an international lounge, complete with interpreters and personnel able to facilitate transactions—aimed at assisting foreign guests." PMMI is planning to include in its exposition this year in Atlantic City a variety of management, educational and technical seminars.

The International Petroleum Equipment Exposition in Tulsa, held every five years, was formerly limited to American exhibits. It now actively solicits foreign participation. This year, the sponsors expect attendance from the United Kingdom, France, Japan, and Canada to increase, as exhibitors from those countries will be included for the first time. Such participation is seen as heightening interest in the symposium being held in conjunction with the event, and every new contact from abroad is regarded as a potential buyer.

Registering at the Food and Dairy Processing Expo in Houston last fall were 411 food processors from 35 countries outside the United States and its territories. An official of the sponsoring organization, the Dairy and Food Industries Supply Association, said that "a large share of the credit for bringing these overseas processors to our show must go to the U.S. Commercial Attaches and representatives of the U.S. Travel Service abroad who promote the fair to key processors in countries around the world."

Attendance doubled since 1965

The Production Engineering Show at Chicago last year, sponsored by the National Machine Tool Builders' Association, reported that foreign visitor attendance—at 4,000—was almost double that of the preceding show in 1965. The sharp increase is attributable to early planning and Commerce assistance in conjunction with the industry's and NMTBA's efforts to attract foreign buyers.

According to Association officials: "Going international has stimulated interest in both the Production Engineering Show and the Machine Show held concurrently. With Commerce assistance, we are planning vigorous

promotion abroad and expect to see another jump in foreign buyer attendance at the 1972 exhibition, when the two shows will be merged."

At Commerce, J. William Nelson, who heads the group that will now pull together much of the Department's assistance to commercial exhibitions in the U.S., sees major benefits possible both for American companies and the nation.

"The 3,000 or more industry, association or privately organized fairs held periodically in this country represent what is obviously a major, and probably largely untapped, means for expansion of our exports. Foreign businessmen today often are as mobile as their American counterparts. Seeing that they get to our domestic fairs complements the U.S. overseas effort," he said.

Benefits to sellers, buyers

Nelson sees that, for the U.S. exporter, exhibiting in his own country to expand sales abroad has apparent advantages:

► The expanding number of foreign buyers in attendance provides increasingly effective exposure to potential markets abroad.

► There is a chance to see how his competitors in the U.S. are aiming at foreign sales.

► Through seminars, which are often an important part of exhibitions in this country, he may find a link with technicians or professionals from abroad, and learn how his products relate to developments worldwide.

The foreign buyer gets benefits, too:

► The U.S. Commercial Officer with whom he makes initial contact can help direct him to fairs of greatest interest to him.

► He can get assistance in making many U.S. business arrangements.

► At the show, if the equipment he sees does not suit his needs, he is in a position to visit an American factory that has it.

The Commerce program is being handled by the Domestic Trade Fairs and Expositions Staff in the Bureau of Domestic Commerce's Office of Business Services.

Under the program, staff members in Washington keep U.S. Commercial Officers abroad abreast of the scheduled events. The officers, in turn, notify prospective buyers, and aid in distributing sponsors' promotional brochures in appropriate languages.

Increasingly, the Expositions Staff will be available to counsel sponsors and managers—as to selectivity in attracting business from foreign markets, lead time required for overseas publicity, amount of promotional material required for overseas use and in what languages, show techniques, foreign visitor registration, and translation services.

ATTENDANCE DOUBLED IN FIVE YEARS— *Foreign visitors registered at the 1970 National Machine Tool Builders' Association shows in Chicago reached a total of 4,000, about twice that recorded in 1965. The NMTBA credits Commerce Department assistance for some of this increase.*

Later, at show time, the Expositions Staff and Commerce Field Offices will set up exhibits and booths to dispense information about the various services it offers, and to answer questions—or direct questioners to appropriate sources—on industry trends, export promotion, patents, financing, export control, Census figures. Officials may also assist in arranging plant visits for foreign visitors.

The Trade Fair Act of 1959 assigns to Commerce Department the task of certifying qualified trade fairs for duty-free entry of foreign exhibit items. During the first year of operation, only three applied. Now, the

AN INTERNATIONAL SCENE—*On the floor at the exposition of the National Association of Home Builders are executives, technicians from many countries.*

Expositions Staff reports, 60 to 70 applications are received annually.

Emphasizing the broad assistance available from the Commerce Department and Commercial Officers overseas, the New York Regional Export Expansion Council and the New York Field Office several years ago inaugurated a special promotion in this field—the V.I.P. (Visit, Investigate, Purchase) program. Utilizing the services mentioned, the sponsors select key trade fairs in the area for special promotion. A V.I.P. kit—containing an invitation from the Secretary of Commerce, exposition details, information on how to make travel arrangements, services available—is mailed by fair managers and exhibitors to potential overseas clients. In Commerce, the Expositions Staff, U.S. Travel Service, and the Office of International Trade Promotion, all cooperate in making appropriate contacts abroad, through V.I.P. mailings. The Regional Export Expansion Council V.I.P. committees meet with area banks, airlines, travel agencies, freight forwarders, and custom house brokers, and notify American Chambers of Commerce overseas.

V.I.P. visitors who attend a trade show in the United States are welcomed at a special registration desk, where they receive a kit of information about the exposition. They receive a special badge and are provided with lounge facilities. Interpreters frequently are available on the premises.

Plans are under way to conduct V.I.P programs also at selected trade fairs in Chicago and Atlantic City. Other qualifying events nationwide are encouraged to make use of this promotional activity.

Commercial Officers abroad have passed on to Commerce officials some suggestions for U.S. exposition sponsors to keep in mind in their planning, to obtain best results in increasing foreign attendance:

► Advance notice—basic information such as dates, location, products—is most important; 10 or 12 months' advance notice is not too long. Catalogs can come later.

► Seminars during a fair are strong attractions and programs should be planned and announced early. Participants from abroad often are a part of such programs, just as U.S. specialists frequently are scheduled for seminars at overseas fairs. Since engineers—rather than the purchasing department—write the specifications and place orders, opportunity to attend such meetings can help a company justify sending visitors.

► Eastern European businessmen generally must get permission to travel, for which they need at least three or four months' lead time.

► Promotional materials should be prepared in the language of the area in which they are to be distributed. Early consultations with the Expositions Staff can help determine which target areas require appropriate language preparation.

—Office of Business Services

V.I.P. VISITORS—*Foreign buyers given special courtesies at the V.I.P. (Visit, Investigate, Purchase) Lounge at the 1969 National Hardware Show at the Coliseum in New York, are seen with Howard G. Sloane (rear), chairman of the sponsoring New York Regional Export Expansion Council unit.*

Patent, Trademark Law Revisions Designed To Aid Business, Consumer

Senate Subcommittee Schedules Hearings May 11-12 On Proposed Amendments

Patent law revision had its birth with a 1966 Presidential Commission study of the patent laws which resulted in the recommendation of sweeping revisions of a number of significant provisions.

The Commission's recommendations have formed the focal point for discussions within public and private circles since 1966 and led Sen. John L. McClellan, Chairman of the Senate Subcommittee on Patents, Trademarks and Copyrights, to introduce a succession of patent law revision bills. Each bill was designed to bring about consideration of the remaining differences of opinion.

More hearings

Hearings were held in 1967 and 1968 on some of the earlier bills introduced. The current bill in the 92nd Congress, S. 643, is the culmination of these hearings and the various bills introduced over the past four years.

Sen. Hugh Scott, in response to businessmen, introduced amendments to S. 643 to clarify the relationship between the patent and the antitrust laws. These amendments appeared first in 1970 and have stirred considerable interest and discussion in the business community and in legal circles.

Senator McClellan has scheduled further hearings before his Subcommittee May 11-12 on the Scott amendments, but most of the provisions of S. 643 will apparently not be the subject of further hearings in the Senate. The hearings will cover, along with Senator Scott's amendments on the patent-antitrust question: Another Scott-introduced amendment to S. 643, the clarification of the relationship between the Federal patent laws and the traditional right of states to enforce contracts involving trade secrets and industrial knowhow; a provision in S. 643 repealing the compulsory licensing provision of the Clean Air Act of 1970; adjustment of patent and trademark fees; and the recognition of priority rights for inventor's certificates issued by some Eastern bloc nations. The other significant features of the current bills were considered in the hearings held in 1967 and 1968.

Many businessmen feel that the patent laws have lost some of their effectiveness in encouraging new inventions and investment in new inventions, because courts so often hold patents invalid. When patents have a poor track record in court suits, businessmen hesitate to invest risk capital in new inventions, and inventors lose their enthusiasm.

Major objective

A major objective of the patent revision legislation is the enhancement of patent validity. Under the patent laws, it is not enough for an invention to be new. Even a new invention cannot be patented if the differences between it and earlier inventions are not significant enough to be considered "unobvious" to the ordinary worker in the

technology involved. In most lawsuits involving patents, the question of "unobviousness" is raised and is felt by many to be subject to misinterpretation in the Patent Office and in the courts.

S. 643 states additional guidelines for judging the "unobviousness" of inventions, which would be uniformly applied regardless of the nature of the invention involved. It will also require courts to accept the expert determinations of the Patent Office unless there is convincing evidence that the Patent Office was wrong and thereby standardize the burden imposed by the courts in a party challenging the validity of a patent.

A feature of many foreign patent systems which the patent bill will add to the patent laws is the post-issuance examination of patents. For a short period following the issuance of each patent, concerned members of the public will be able to request the Patent Office to reexamine the patent on the basis of the evidence and information they supply.

Inexpensive to question

Persons fearing that a patent may affect their business or make them liable for patent infringement will have for the first time a quick and inexpensive way to question the invalidity of a patent only after they are sued for infringement or threatened with a suit.

Other features of the patent bill will also enhance the validity of patents. Applicants may be required to submit briefs with their patent applications explaining the patentable distinctions between their inventions and the prior art (earlier patents and descriptions of inventions in technical publications). A complementary provision puts the burden of proving patentability on the applicant when doubts over patentability arise during Patent Office examination.

Another important feature of the patent bill would permit the owners of inventions, as well as inventors themselves, to apply for patents. Today, only an inventor may apply for a patent, even though all the legal rights in the invention belong to the corporation which employs him. With the advent of modern corporate research, however, this technicality requirement of present law has caused more and more difficulties for the corporate owner of an invention. Quite often, an inventor is no longer employed by the company applying for a patent or it is not convenient to have him execute the required legal papers. While permitting the company to apply for a patent, the patent bill also provides certain provisions intended to protect the rights of inventors.

Interference

The most complex, time consuming and expensive procedure involved in obtaining a patent is an interference, which, fortunately, occurs only in a very small percentage of patent applications. Interferences are proceedings for determining the earliest inventor when more than one has applied for a patent for the same invention. The patent laws award the patent to the first inventor, whether or not he was the first to apply for a patent.

This legal principle overcomes any tendency for an inventor to rush to the Patent Office with a poorly prepared patent application in case there might be a rival inventor. In almost every foreign country, on the other hand, the first inventor to file his application is considered the first inventor. Their patents are often complained about as incomplete and uninformative, and frequently are of little use to the public as a technical document.

Under S. 643, the principal of awarding a patent to the first inventor would be retained, but a number of procedures intended to simplify interferences and reduce their number would be instituted. This in turn is intended to simplify and speed the issuance of patents.

Satellite search centers

The Patent Office is given authority under the patent bill to establish satellite search centers throughout the country. Now, a comprehensive search of prior patents can only be made in the Patent Office in Arlington, Virginia. Although a few libraries outside of Arlington have complete collections of patents, these collections are not arranged for searching patents in specific technical categories, as they are in the public search room of the Patent Office.

The present 17-year patent term begins with the granting of the patent. Since the time of pendency in the Patent Office does not affect this term, applicants sometimes delay prosecution of their applications. Provisions in the bill are intended to remove any incentive for an applicant to delay the issuance of a patent by measuring the patent term from the filing date of the application

in the Patent Office. Under the bill, the patent term would expire 20 years from the date of filing.

Clean Air Act

Recently-enacted amendments to the Clean Air Act provide for the compulsory licensing of patented inventions relating to air pollution under certain conditions. This provision was widely attacked in late 1970 when it was under consideration in the Congress and the Administration expressed its opposition to this and several of the other proposed amendments to the Clean Air Act. Senator McClellan has included a provision in S. 643 which would repeal this feature of the Clean Air Act. The Senator's proposal would permit the Administrator of the Clean Air Act to recommend appropriate amendments to the patent laws if they prove to retard the intention and purpose of the clean Air Act.

The most controversial revision of the patent laws now being considered centers on Senator Scott's antitrust amendments. These amendments would clarify the licensable nature of the patent grant and specify that state contract and trade secret law would not be preempted by the Federal patent laws. Recent court decisions, including one by the Supreme Court, have raised questions about this area of law. Business has complained of the uncertain legal status of many patent license agreements and the necessity for risking lawsuits and adverse decisions to include long-accepted provisions in license agreements.

Revisions of trademark law

In the field of trademarks, an amendment to the Trademark Act was sponsored in the 91st Congress both by the Administration and interested members of the public sector. This amendment, if reintroduced in the 92nd Congress, would modernize the federal registration system with respect to the requirement for use in commerce. At present, an applicant for a trademark registration is required to present, at the time of filing his application, evidence of use of his mark in interstate or foreign commerce.

The practical consequence of the present requirement is that businessmen must use a mark prior to the time when they are reasonably assured of the right to registration, and, in many cases, long prior to full development of a new product and its introduction on the market in commercial quantities. The so-called "Intent to Use" bill of the 91st Congress recognized these business realities by permitting an application to be based on an intention to use the mark. This bill would permit the prospective trademark owner to secure his legal position more quickly and also avoid the often-questioned practice of making a token sale of the product in order to secure a basis for filing under the Federal statute.

Under the "Intent to Use" bill, a registration would not be granted until the mark had been used, but the evidence of use would be required within a certain period following examination of the application rather than, as now, before the application is filed.

Another feature of the bill is an early publication of all marks promptly after filing in order to provide more certain notice of trademark claims to others whose rights may be affected by an applied for mark. This initial publication would be in addition to the present publication for opposition purposes which takes place following examination.

Against unfair competition

Another bill now pending in the 92nd Congress, introduced by Senators McClellan and Scott, would have a significant impact on the business community. It would establish a federal law of unfair competition to supplant the myriad, and often conflicting state laws governing unfair competition.

The bill is intended to provide a uniform federal unfair competition law which may be enforced uniformly with a single suit.

The principal effect of the proposed legislation will be the availability of nationwide protection against acts of unfair competition, regardless of where the lawsuit is instituted. The bill is intended to provide more equitable relief in most unfair competition cases than is now available. Relief against unfair competition would be achieved under the bill by amendment of the Trademark Act of 1946, which already provides a remedy against certain specific types of unfair competition.

The bill specifies a number of wrongful acts for which relief will be available. These include the traditional wrong of "palming off" one's goods as those of another, trade disparagement by false or misleading statements about a competitor, misappropriation of a trade secret or confidential information, and other acts long recognized by the courts under state concepts as actionable.

—Patent Office

How Commerce Serves You

This is another in a series of one-page summaries of the services that specific Commerce Department units provide.

President Nixon has proposed—and the Congress ratified—a program aimed at rebuilding the American Merchant Marine. The Commerce Department *Maritime Administration* is charged with directing this program.

The new program envisions a decade of new ship construction geared to replace the two-thirds of the present fleet that will be heading for the scrapyards in the next few years. Direct government assistance in the form of construction subsidies will support a large part of this new building.

The Assistant Secretary of Commerce for Maritime Affairs, A. E. Gibson, has said, "Our merchant fleet forms an active adjunct to U.S. foreign trade interests. It can and does exercise sufficient leverage on cargo movements to insure that rates and schedules are not only equitable, but also foster our trade. Further, our merchant fleet has pioneered new concepts of ocean transportation that will improve the economics of this movement so as to enable U.S. exporters and importers to find new markets and new sources abroad."

The Merchant Marine makes direct and significant contributions to the American economy that would be missed if there were no American ships—

- **The merchant marine and merchant shipbuilding industries generate about $3 billion annually in Gross National Product,** mainly in purchases from other sectors of the economy and services rendered.
- **The U.S. Merchant Marine contributes to the U.S. Balance of Payments.** One study shows that in three years (1964-1966), U.S.-flag ships earned or conserved about $2.2 billion in Balance of Payments funds. Further contributions will be made by a revitalized fleet.
- **The existence of an American flag merchant fleet protects this Nation's foreign trade.** It guarantees that, regardless of shifting international trade patterns, American goods can always be moved on essential trade routes at reasonable rates. Moreover, American ships insure this country leverage in determining the freight rates on which U.S. trade moves.
- **American ships provide employment**—for some 40,000 American seafarers, plus 250,000 taxpaying employees in supporting industries.
- **The American Merchant Marine serves as a supply link in the U.S. defense network that extends around the world.** U.S. merchant ships, for the most part, are built with regard to fulfilling possible military requirements and stand ready to carry military cargoes anywhere in the world they may be needed.

To facilitate U.S. shipbuilding, Maritime has been instrumental in expanding the federal ship mortgage insurance program, under which the Government insures the principal and interest on commercially-placed ship mortgages, guaranteeing them as an investment. The former $1 billion ceiling on the amount of insurance that could be written has been increased to $3 billion. This will not only assist operators building ships with subsidy in financing their portion of the cost, but will also help many unsubsidized operators in foreign and domestic trades.

To encourage the construction of modern ships for the U.S. Merchant Marine, the Maritime Administration worked to broaden the eligibility standards to set up tax-deferred construction reserve funds. Formerly, this privilege was limited to a handful of operators who were receiving operating subsidy from the Government. Now, all operators engaged in the foreign trades, as well as those in the noncontiguous domestic and Great Lakes trades who are qualified, are eligible to enter into agreements whereby tax-deferred funds can be deposited to raise the capital necessary to implement ship replacement programs.

A. E. Gibson
Assistant Secretary of Commerce For Maritime Affairs

The Government alone cannot carry the President's program to fruition. The program challenges the shipbuilding and shipping industries to improve their competitive position, with the Government supplying the opportunities required.

But the financing required to build the new ships will in large part have to come from outside the industry, from the American investment community.

Says Assistant Secretary Gibson, "We strongly believe that in this new era the profit potential is tremendous and that this industry will increase in attractiveness as a long term investment as the program unfolds. Industry leaders have already begun a concerted effort to take this message to the investment community, and we in the Government will assist all that we can."

DOMESTIC BUSINESS REPORT

- **VISIT USA exhibit opens in Montreal June 12.**
- **U.S. and U.S.S.R. exchange delegations to study patent systems.**
- **Census Bureau says five percent of U.S. populace is of Spanish descent.**
- **Todd Shipyards awarded $32.5 million ship conversion contract.**
- **President announces White House Conference on business.**

Biosphere To Promote U.S. Tourism At Man And His World Exposition

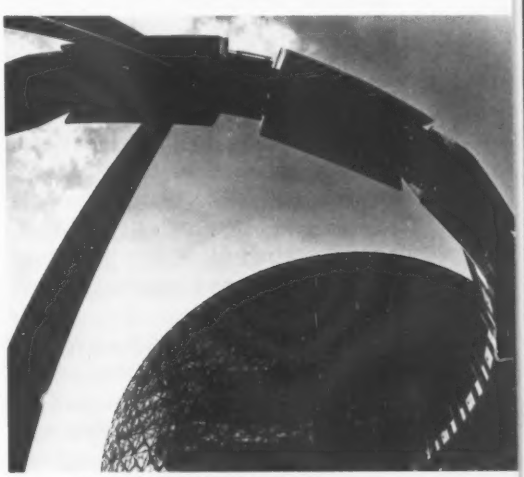
A colorful and many-sided attraction intended to promote tourism in the U.S. will be housed this summer in the Biosphere in Montreal.

The Biosphere, a huge tubular steel and acrylic globe, served as the U.S. pavilion for Expo '67. Thereafter, it was deeded by the U.S. Government to the City of Montreal. The City turned it into a botanical garden featuring tropical birds and plants, and named it the "Biosphere," by which it has been known for the last three summers. Temporary disposition is being made of the tropical birds and plants to clear the big globe for a VISIT USA exhibit. On June 12 it will be returned to the USA for the three-month duration of the 1971 Man and His World Exposition in Montreal.

The exhibit is sponsored by Commerce's United States Travel Service in cooperation with the Discover America Travel Organizations, a travel industry group. The exhibit will be organized and managed by the Smithsonian Institution Division of Performing Arts, which is working with Walt Disney Productions on set design.

Visitors to the fair this summer will be lifted to the top of the 20-story, 190-foot structure by the largest free-span escalator in the world. From the top they will make a regional folk tour of the U.S., descending through the exhibit areas by a mapped-out route of walkways and escalators. The exhibit incorporates stage-like set designs constructed on massive support levels suspended inside the Buckminster Fuller-designed pavilion.

Within the pavilion, regional displays are being arranged to coincide with DATO's eight-region division of the country. They will appear in geographical progression, beginning with the Northeastern States (Yankee Country), and continuing south down the Atlantic Coast through the Mid-Atlantic States (George Washing-



U.S. Biosphere in Montreal

DOMINANT DISPLAY—*Dwarfing the buildings and automobiles which surround it, is the magnificent tubular steel globe that houses the U.S. exhibit for the 1971 Man and His World Exposition in Montreal. The three-month display will open June 12.*

ton Country) to the Southern States (Dixieland). Next are the Midwestern States' display (Middle America) and three regional displays by Western States (Old West, Frontier West and Far West).

The regional displays will include large theme props such as a 130-foot California redwood tree, a Pennsylvania Dutch barn with a hex symbol, the prow of a Yankee sailing ship, a New Orleans-type jazz festival hall, a Midwestern windmill and grain silo, an Indian ceremonial teepee, and a tropical island setting with a waterfall.

Artisans, craftsmen and performers will be assigned to each display. Some will demonstrate cookery common to their regions. Others will show how to make canoes and totem poles. There will also be singing, ethnic dancing, story telling, and musical instrument demonstrations.

A major purpose of the regional displays is to dispel the idea among some foreigners that the U.S. is culturally and scenically homogeneous, with no great contrast among regions. Variety is an important factor in persuading people to travel in foreign countries. The capsule folk tour of the U.S. through the "Biosphere" will show visitors the U.S. has the variety in its different regions.

Bilingual travel counselors representing each region of the country will be on duty in a trip-planning area to advise visitors and to distribute literature. The counselors will not book customers, map itineraries or develop tour package plans. They will simply refer interested persons to appropriate people or agencies in the travel industry.

The U.S. travel exhibit is expected to be of interest to Canadians, who comprise the overwhelming majority of foreign visitors to this country, and also to U.S. citizens visiting in Canada. The U.S. has a travel balance of payments deficit with Canada. In 1970, an estimated 9.8 million Canadians visited the United States, while an estimated 14 million Americans visited in Canada—more than the total foreign visitor count to the U.S. from all countries.

—United States Travel Service

Local Developers Get Commerce Guidebook

Indian reservations, a sector of growing importance at home and abroad, and community business growth are the topics of two economic development handbooks published by the Department of Commerce.

"Federal and State Indian Reservations," an Economic Development Administration handbook, is a comprehensive source of basic details about Indian reservations. It was prepared from information from the reservations, the Bureau of Indian Affairs, the Smithsonian Institution, the Department of the Interior and other federal and state agencies.

"The Local Economic Development Corporation, Legal and Financial Guidelines," is a sourcebook on legal, financial and other aspects of local economic development companies. It provides step-by-step guidelines for organizing and operating development companies.

The local economic development corporation guidebook is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, for $2. The Indian reservations handbook is available from the same source for $3.75.

—EDA

Ombudsman For Business

Businessmen who need assistance in their dealings with the Federal Government now have a central office in Washington, D.C., to write or call for information, suggestions, or even for registering complaints—the Commerce Department Ombudsman for Business.

All inquiries should be addressed to the Ombudsman, Thomas E. Drumm, Jr., Special Assistant to the Secretary, U.S. Department of Commerce, Washington, D.C. 20230, or call 202-967-3178.

EXCHANGING PATENT IDEAS—*Pictured at the recent Soviet Delegation visit to the U.S. were the Russian team (seated) and their U.S. hosts (standing). Participating for the U.S.S.R. were (from left) Vladimir Nikolayevich Yevgen'yev, Dept. for Patenting Inventions Abroad; Lev Yevegen-Yevich Komarov, All-Union Scientific Research Institute of State Patent Expertise; Boris Petrovich Nazarov, Committee on Inventions and Discoveries; Yuri G. Kremniev, Amtorg. U.S. sponsors were Kenneth W. Brown, Cabot Corp.; Homer O. Blair, Itek Corp.; Sherman J. Kemmer, The Standard Oil Co.; Dudley B. Smith, Celanese Corp.; George R. Clark, Sunbeam Corp.*

U.S.-U.S.S.R. Patent Studies Can Protect Industrial Property Rights

The United States and the Soviet Union are exchanging delegations this year to study each others' systems for patent management and patent licensing.

A three-man Soviet team arrived in Washington March 21 for a visit of two and one-half weeks. In return, a U.S. industry group, headed by Commission of Patents William E. Schuyler, Jr. will conduct a fact-finding study in Moscow and other Soviet cities during June.

Bilateral agreement

This particular activity falls within the umbrella of a bilateral Agreement on Exchanges for 1970-71 between the two countries signed in February of last year.

Never before has the subject of patents been included in these Agreements, indicating the increasing interest being manifested by the Soviets in international patent activities.

The U.S. State Department considers the visits of American citizens to the Soviet Union and of Soviets to this country under the exchange program an important element in Soviet-American relations.

For each exchange, a sponsor organization, either governmental unit or private facility, is designated as the host to the Soviet visitors in the United States. The U.S. Patent Office was the sponsor for the visiting Soviet Patent Delegation, and in this role worked in a full partnership with the Licensing Executives Society, an organization with a membership from over 150 companies.

There are two aspects of the exchange: patent documentation management and patent licensing. The former underscores Soviet interest in the manner in which computers, and other mechanized and automated systems, are employed in the U.S. to control, process, and classify all kinds of patent documentation. The emphasis on the U.S. Delegation's probings, however, will be toward the licensing end of the Soviet patent system.

The primary inducement to a native inventor in the Soviet Union is not a patent monopoly but a so-called inventor's or author's certificate. Under these certificates, rather than retaining for himself the right to exclude others from practicing the protected invention (as he would if he owned a patent), the Soviet inventor divests himself of all rights to the invention to the State in exchange for a remuneration of up to 20,000 rubles (about $22,000) and various fringe benefits. This is, of course, fully consistent with the socialist system of public ownership of all means of production. However, recognizing the desirability of attracting foreign technology, the Soviets maintain a Western style patent system.

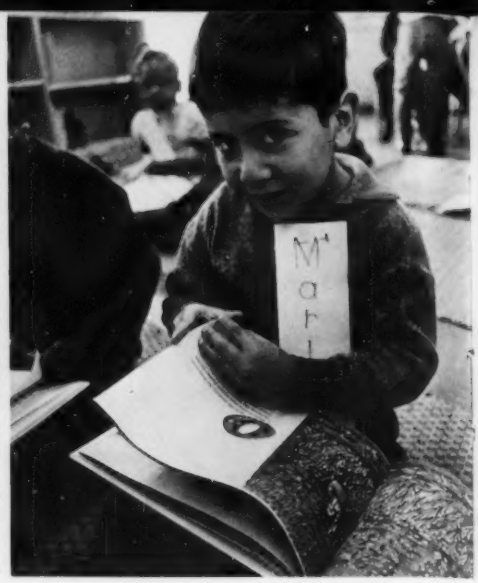
Soviet visit

The Soviets spent a week studying in-house operations of the U.S. Patent Office. A field trip was made to the International Computaprint Corporation in Philadelphia to observe how this contractor converts information from patent applications allowed by U.S. Patent Examiners into machine readable form. In addition to the government end of patent management, the Soviets studied how principal U.S. companies themselves administer patent documentation.

A seminar was conducted at the State Department, prior to industry visits, by members of the Licensing Executive Society and Vincent Travaglini, Director of the Foreign Business Practices Division, Bureau of International Commerce.

While the U.S. Delegation will be studying the Committee on Inventions and Discoveries, the approximate counterpart of the U.S. Patent Office, its main focus will be on institutions where practical information may be obtained regarding the mechanics and procedures for the best use of U.S.-owned Soviet patents.

—U.S. Patent Office



CLOSING THE GAP—*The recent survey revealed the gap between Spanish origin persons and all others is not so great among the young. More of the young (left) are completing high school. Although 4.6 million, the majority of whom are in the Southwest (center), speak Spanish as their current language, the younger generation (right) is also learning English.*

Spanish-American Population Is 5 Percent Of U.S. Total

Four out of every five persons of Spanish origin living in the United States were born in this country, and Spanish is spoken in the homes of about one-half of the U.S. population of Spanish origin.

These facts, and others, are disclosed in a recently published report of a Census Bureau survey made in late 1969. It was the first major attempt by the Commerce Department to measure the social and economic status of all who identify themselves as of Spanish origin.

More than 9 million

There are 9.2 million persons in the country of Spanish descent. Over 5 million of these are of Mexican origin, 1.5 million, Puerto Rican origin, and 600,000 each, Cuban and Central or South American origin, with 1.6 million identifying themselves as Other Spanish descent. Sixty-one percent of the Spanish origin population is concentrated in five Southwestern states—Arizona, California, Colorado, New Mexico and Texas.

Although the survey shows that persons of Spanish origin in the U.S. have less education than the population as a whole, it also notes that younger members of the Spanish community are closing the gap.

Thirty-four percent of persons of Spanish origin over 25 years old had completed high school, compared with 56 percent for the population as a whole. However, young adults of Spanish origin are much better educated than their elders and the gap between Spanish-origin people and people of other origins is not as great among young adults. The median number of years of school completed for the Spanish origin population over 35 years old is 8.5 years compared to 12.0 years for the remainder of the population. Among the 25-34 age group, Spanish origin people have a median education attainment level of 11.7 years compared to 12.6 years for people of other origins in this age group.

With the exception of English, Spanish is spoken by more persons than any other language in the United States. In fact, Spanish was reported as the mother tongue of 6.7 million persons, and as the current language of 4.6 million. This continued use of the Spanish language is an indicator of the strength of those bonds which tie Spanish persons to each other.

Comparisons of the result of the Spanish origin survey with other groups reveal that:

- Median family income among all persons of Spanish origin was about $5,600 at the time of the survey in late 1969, compared with about $8,000 for other persons.
- Spanish origin workers were less likely to hold white-collar jobs than the remaining employed population of the United States. Only 25 percent of employed Spanish origin men held white collar positions, compared with 41 percent for men of other descent. Only 41 percent of employed Spanish origin women held white collar jobs, compared with 61 percent of other employed women.
- Spanish origin persons had an unemployment rate of 6.0 percent, about 1.7 times the unemployment rate of all other persons in the labor force during the survey.
- Spanish origin persons comprise 5 percent of U.S. population.

Copies of the report, Persons of Spanish Origin in the U.S., P-20, No. 213, may be obtained for 50 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from any Commerce Field office.

Copies in Spanish are free from the Census Bureau, U.S. Department of Commerce, Washington, D.C. 20230.

—*Census Bureau*

New U.S. Ship Conversion Contract Spurring Two West Coast Yards

Todd Shipyards at Seattle and Los Angeles are beginning to hum, as work is begun on the conversion of five C-4 "Seamaster" freighters to full containerships.

The activity at the two Todd Shipyards Corp. installations follows the award of a $32.5 million contract to the company for the ship conversions by American President Lines, Ltd., and the Maritime Administration of the Commerce Department.

In announcing the signing of the contract, A. E. Gibson, Assistant Secretary of Commerce for Maritime Affairs, said that the key to the Nixon program to modernize and revitalize our merchant marine is the development of high performance ships, which can offset or minimize the lower operating costs of foreign-flag ships.

"U.S. steamship lines who are planning the transition to containerized and other modern cargo systems are on the way to a bigger slice of U.S. trade," he stated.

"Converting these five ships into full containerships," Gibson said, "is but one of the giant steps being made by U.S.-flag ship operators to compete more effectively for the high value cargo moving in U.S. foreign trade."

The transformation of the vessels, in line with world trends towards containerized cargo, not only will expedite turnaround service and promote a greater volume of traffic between ports for the APL ships, but the major changes will increase the ships' capacities.

Todd's offer of $6,493,375 per ship for the conversion work was $313,625 under the next lowest bid. Under Maritime's construction-differential subsidy program, the Government will pay 41.5 percent, or $2,698,375, per ship for the conversion costs, representing the difference between Todd's bid and the estimated cost of performing the work in a West Europe shipyard. The 41.5 figure is well below the 45 percent Government construction aid ceiling set for 1971 in the Merchant Marine Act of 1970.

When contacted about the new agreement, Todd's President, John T. Gilbride, said, "We, of course, are happy to have been awarded this contract—especially at a time when production at our Seattle and Los Angeles yards is at a low ebb. It will help immeasurably to keep our nucleus of skilled craftsmen together.

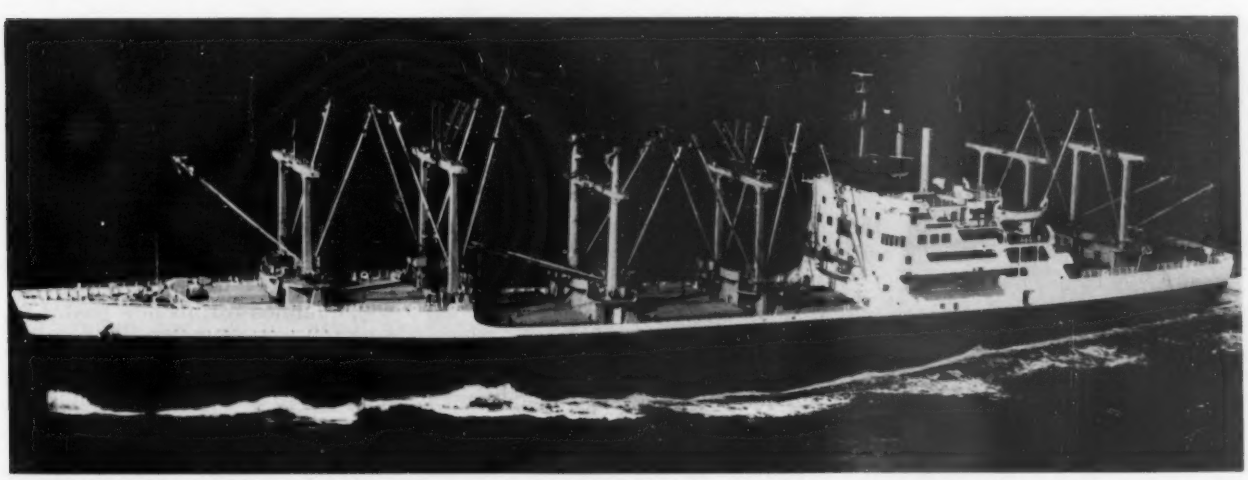
"American President Lines," he continued, "by following this method of procurement; i.e., conversion, will be able to capitalize sooner on its growing containerized trade with the Far East. The Maritime Administration is to be commended for recognizing the importance of this trade and for its part in the contract award."

John T. Gilbride
President
Todd Shipyards Corporation

The five "Seamasters" scheduled for conversion were constructed for APL in 1967. They include the *President's Fillmore, Grant, McKinley, Taft* and *Van Buren.* Upon conversion (which will require from 345 to 525 days), APL will utilize the vessels in its U.S. Atlantic, Gulf and Pacific/Indonesia, Malaysia and Singapore service.

APL has plans to convert three more conventional freighters to containerships in the near future.

—Maritime Administration



A NEW DRESS—*The* **S.S. President Van Buren,** *an American President Line freighter, is one of the five ships slated for conversion.*

President Plans Meeting To Look At Business—1990

President Nixon has scheduled a White House Conference, which will bring together key individuals from business, labor, the professions, education and government to discuss the character of the American business system in 20 years.

The Conference, "The Industrial World Ahead: A Look at Business in 1990," will be held in Washington, D.C., Nov. 8-10, and will cover four major themes: The structure of the private enterprise system, jobs ahead, technology and resources for business, and the social responsibility of business.

In announcing the plans, the President said that change in America is coming at an accelerated rate, presenting new challenges to the private enterprise system on every front.

"Because change will continue to occur with growing urgency," the President stated, "it is essential that all segments of our society fully comprehend the forces at work and recognize that plans must be made to make the most of the opportunities ahead. I feel it is time for key leaders with an interest in our industrial society to take a long-range look and develop policies that will help shape that future. It is for this reason that I am calling this White House Conference."

Co-chaired by Secretary Stans and Secretary of Labor James D. Hodgson, the Conference will include as participants decision-makers from all parts of the United States. The sessions will allow a dialogue on factors which will shape U.S. business in the next two decades, analyzing the challenges which these factors represent and recommending methods by which these challenges can be met and overcome.

—Office of the Secretary

Calendar For Businessmen

May 5-7—Bellaire, Mich.— "Strengthening Local Government," seminar on planning and economic development, Shanty Creek Lodge. Contact Richard M. Crain, Northwest Michigan Economic Development District, Room 101, Technical Institute, 715 East Front St., Traverse City, Mich., 49684. Phone: 616-946-5922.

May 19 — Oakland, Calif. — Asst. Secretary of Commerce for Economic Development, Robert A. Podesta, will take part in formal dedication ceremonies for the Seventh Street Marine Terminal port facilities. Contact Ben E. Nutter, Port of Oakland Office of Economic Development. Phone: 415-444-3188.

June 8—Chicago — Camping Congress, Pick-Congress Hotel, by the Family Camping Fed. Deputy Asst. Secretary of Commerce James Hamilton III will discuss camping by foreign visitors in the United States. Contact Donald J. Ryan, P.O. Box 1138, Billings, Montana, 59103.

Commerce Council To Aid Consumers

Better product information, better service, more reliable products and understandable warranties may be the result of a newly created Council in the Commerce Department—the National Business Council for Consumer Affairs.

The Council is being set up by Secretary Stans at the direction of the President to encourage business leaders to adopt voluntary programs in response to legitimate consumer complaints.

Named by the Secretary to be the Executive Director of the Council is William D. Lee, Deputy Assistant Secretary for Domestic Business Policy.

Wm. D. Lee

Voluntary actions on the part of business, according to Stans, will not only build better lines of communication between the consumers and the businessmen, but can serve to avoid legislative measures which could prove costly for both the buyers and the sellers.

Approximately 50 businessmen from among chief executive officers of corporations or of consumer products divisions of major diversified corporations are now being appointed by the Secretary to serve as Council chairman and members. It is expected that the Council will be operational within two months.

Stans believes that through the work of the new Council the Nation will see widespread adoption of improved practices by business. Said the Secretary, "We have no sympathy with the fly-by-night businessman who will not improve his consumer relations voluntarily, but we don't think it wise to turn the government screws on the whole business community because of the few.

"We are convinced that, in areas of advertising, warranties and other related matters, a great deal can be done by calling industry representatives in and exchanging views on effective policies and practices that are fair to both the buyers and the sellers and don't restrict the consumers' freedom of choice while doing it."

The new Executive Director is well qualified for his new post. Lee, who has served the Commerce Department since 1969 as Director of the Bureau of Domestic Commerce, came to the Federal Government from the General Electric Co.

—Office of the Secretary

SCIENCE & TECHNOLOGY REPORT

- **NOAA scientists seek evidence of sea floor spread**
- **General Dynamics to build ocean platforms**
- **Fish protein plant opened to demonstrate production**
- **Stans names members to fabrics group**
- **Patents of special interest**

NOAA Scientists Seek Evidence Of Sea Floor Spread In Pacific

New evidence is being sought by a U.S. scientific expedition presently on a three-month voyage in the Pacific Ocean that the sea floor there is constantly moving, carrying with it segments of the earth's crust, including the continents.

The party sailed from Seattle March 31 abroad the *Oceanographer*, a 3,800-ton "floating laboratory" of Commerce's National Oceanic and Atmospheric Administration. It is operated by NOAA's National Ocean Survey.

Following completion of the first leg of the expedition, the *Oceanographer* will put into Honolulu around April 28 for about a week and then head north toward the Aleutian Islands on the remaining three legs of the investigation.

These will involve a study of the oceanic crust for further evidence

STUDYING THE SEA FLOOR—*NOAA scientists aboard the* Oceanographer *"floating laboratory" are engaged in a three-month study of the floor of the Pacific Ocean to determine if it is constantly moving, carrying with it parts of earth's crust.*

to support the theories of sea floor spreading and plate tectonics which are predicated on the belief that the northeast Pacific basin is part of a large rigid crustal plate that is presently moving in a northwesterly direction. As it does so, it is moving beneath the Aleutian Islands arc and the continental margin of Alaska. Thus, as new crust is formed, the old crust is forced back into the earth by the pressure.

Clues to this will be sought in various areas, including the Chinook Trough, about 600 miles south of the Aleutians, believed to mark the southern limit of an ancient small crustal plate that broke away in a northerly direction from the main Pacific plate; the northern Gulf of Alaska, where an effort will be made to determine its relationship with the Alaskan continental margin; and a 400 to 500 mile long fracture zone just west of the Queen Charlotte Islands off the British Columbia coast. The scientists will make a detailed examination of the subbottom, using seismic reflection instruments which electronically probe beneath the sediment and muck on the ocean bottom.

Four separate areas of the Pacific are being studied. The first is about 2,000 miles off the Southern California shore, and approximately 1,500 miles northeast of Honolulu. There the oceanographers will seek evidence of sea floor spreading among the hills which dot the ocean bottom 2½ miles below the surface.

This study will take place in an area situated between the Murray and Mendocino fracture zones, giant breaks in the ocean bottom, through which fluid rock is believed to rise from the earth's core, thus causing the sea floor to spread.

On the last leg of the expedition, scientists will investigate two or three undersea mountains approximately 140 miles west of the Queen Charlotte Islands. Dredges will be dropped to the tops of the seamounts to determine their composition and seismic reflections will be made of the mile-high mountains to determine their general structure.

Chief scientists for the expedition are Frederic Naugler and John Wageman of NOAA's Pacific Oceanographic Laboratories. Other participating scientists are Richard Sylvester and Richard Uhlhorn of the Seattle-based laboratories; Jurgen Kienly and David Stone, professors of geophysics at the University of Alaska; John Kummer, University of Washington graduate student; and Robert Stevenson, visiting scientist from the University of South Dakota.

Meanwhile, another expedition aboard NOAA's Ship *Surveyor* is attempting to locate in the South Pacific what may be the oldest portion of the earth's crust in the area between American Samoa and South America.

This expedition is also attempting to establish the role played by this area in sea floor spreading and plate tectonics. It is part of a long-range program to investigate the bottom of the sea and throw new light on the age and history of the earth.

—NOAA

General Dynamics To Build Ocean Platforms To Fill Marine Data Gap

A $3 million contract has been awarded the Electro-Dynamic Division of General Dynamics Corp., of San Diego, to build several ocean platform systems for the National Data Buoy Project Office of Commerce's National Oceanic and Atmospheric Administration.

The ocean platform systems to be built consist of a buoy hull, moorings, power system, data processing system, and communications system. The company also will act as system integration contractor and will modify the Buoy Project's data receiving station located at the U.S. Coast Guard Radio Station, Miami, Fla., to accept data from the new buoy systems.

These oceanographic and meteorological buoys will be deployed in the Gulf of Mexico, where test and evaluation will be conducted by the Buoy Project's staff at Bay St. Louis, Miss. Ship support will be provided by the U.S. Coast Guard.

As designed by General Dynamics, the buoys can withstand hurricane conditions of 150-knot winds, 60-foot waves, and 10-knot currents. Each weighs about 100 tons on station and is capable of carrying more than 100 sensors to measure and report ocean and atmospheric conditions.

The need to fill the data gap in maritime areas has long been recognized. Inhabited regions of the world are reasonably well observed, and international cooperative programs are underway to provide better coverage over land and ocean areas. Measurements of the oceans are available from satellites, ships, and aircraft, a few ocean station vessels, and occasional oceanographic ships sampling the environment. But more detailed information is needed on environmental conditions over vast marine areas.

A network of automatic buoys throughout the oceans of the world, to measure and report environmental conditions in the oceans, coastal waters, bays, estuaries, and Great Lakes would bridge this information gap. They would provide the data needed for prediction of weather, sea state, and fish migration, for monitoring

pollution, and for marine transportation and other ocean-oriented industries. Ultimately, the World Weather Watch and the Integrated Global Ocean Station System programs envision a global network of marine buoys and automatic land stations.

The new platforms are to be part of the project's engineering experimental phase to evaluate buoy systems and improved oceanographic and meteorological sensors, as well as to gain experience in operating a data buoy system and in handling the data from it.

—NOAA

Fish Protein Plant Opened To Demonstrate Production

A plant built to demonstrate the feasibility of the solvent extraction process of obtaining fish protein concentrate was dedicated last week in Aberdeen, Wash., by the National Marine Fisheries Service of Commerce's National Oceanic and Atmospheric Administration.

The facility was designed and built by Ocean Harvesters, Inc., of Los Angeles, and will be operated by that company under an NMFS contract.

The plant is located near the confluence of the Chehalis and Wishkah Rivers on land donated by the Port of Grays Harbor, Aberdeen.

The new plant will not produce fish protein concentrate for commercial purposes but will obtain design, engineering, and economic information to serve as a basis for construction of commercial plants by private industry. It is expected to be able to produce up to 7½ tons of the material on a 24-hour basis.

Philip M. Roedel, Director of NMFS, has said that "the use of fish protein concentrates to fill at least part of the growing U.S. demand for protein is a realistic possibility, especially if certain desirable characteristics, such as solubility for use in beverages, can be developed in the product."

—NOAA

Stans Names Members To Fabrics Group

Ten new members have been appointed to the National Advisory Committee for the Flammable Fabrics Act by Secretary Stans. They will serve through 1972.

"The Department and its National Bureau of Standards are at a critical point in developing standards of flammability to protect children, the aged, and other segments of the public," the Secretary said. "We expect to complete work on a final standard for children's sleepwear soon, for example. This advisory committee has an important role to play in assuring that all such standards are reasonable, practical, and effective."

The new members are:

George Dunn, Vice President, J. P. Stevens Co., New York; Mrs. Ruth L. Galbraith, Head, Department of Consumer Affairs, Auburn University, Auburn, Ala.; Richard H. Goodemote, Assistant Director of Merchandise, Development & Testing Laboratory, Sears Roebuck Co., Chicago; Edward Jenison, Editor and Publisher, Paris Beacon News, Paris, Ill.; Robert O. Lowery, Fire Commissioner, New York; Warren D. Moss, Vice President, Research and Development, Phillips Van Heusen Corp., New York; Leonard H. Rosenberg, President, Chesapeake Life Insurance Co., Baltimore; Philip W. Schindel, Executive Director, Association of General Merchandise Chains, New York; Eugene H. Sherman, Technical Director, J. J. Newberry Co., New York; and John M. Snow, Executive Vice President, National Association of Furniture Manufacturers, Chicago.

Nine members of the original committee have been reappointed to serve to the end of this year.

Patents Of Special Interest

Recent patents issued by the U.S. Patent Office included:

Tamper proof ID card. A tamper proof identification card which is protected against unwanted or unauthorized alterations of information by the utilization of photography. The invention utilizes a photographic transparency in a heat and pressure-laminated structure, which is designed to become defaced if the lamination is opened in any way. Patent No. 3,566,521 issued to Lawrence A. Conner, 137 Skyline Drive, Glen Mills, Pa. 19342.

Chinchilla dust bath apparatus. A dust bath apparatus with a boxlike structure mounted in an elevated position which includes a hopper for bath dust which empties through a low slot into a trough. The trough opens into an adjacent animal chamber having a sloping floor with a discharge opening at the lower end. Patent No. 3,566,837 issued to John H. Denham, Route 1, Weir, Kansas.

Personal propulsion unit. A device to help astronauts maneuver on the moon. The unit is composed of a tubular framework which fits onto the shoulders of an astronaut and supports a disposable propellant tank adjacent the astronaut's chest and has thrusters adjacent each side of the astronaut about at the level of the hips. Controls are provided for tilting the thrusters toward the front and back as well as for throttling the thrusters. Patent No. 3,570,785 issued to Robert M. Croft, Albertville, Ala., Alfred G. Orillion, and Thomas W. Barrett, Huntsville, Ala. The patent was assigned to National Aeronautics and Space Administration.

Safety belt buckle. An automobile safety belt electrically connected to the automobile starter motor so that the safety belt must be closed before the starter motor can be oper-

ated. Patent No. 3,570,621 issued to Robert O. Hampton, 117 E. St., S.E., Apt. 201, Washington, D.C.

Electric marching signs. Electric signs to be worn on the chest of marchers in a parade which can be turned on and off and the message altered. In each sign miniature electric light bulbs, powered by batteries, are set in a rectangular array across a board. Behind the board, where the wearer can reach it, is a rotating drum that switches the lights to change the individual letter or symbol that the marcher carries. Patent No. 3,570,158 issued to George R. Hackett, 772 Hartzell, Pacific Palisades, Calif. 90272.

Teaching aid. A teaching aid including a slide viewer which has two slide tracks in the interior of the viewer which permits the insertion of two overlying indicia bearing slides or cards. Character or word recognition is tested and practiced by having a student insert a second card, identical to a first positioned card so that congruity is effected. Patent No. 3,570,145 issued to Joseph E. Hickey, 174 Eaton Avenue, Meriden, Conn. 06450.

Safety dispenser. A safety dispenser for pharmaceutical products. The container has an opening normally closed by two gates, one at each end, with the gates being independently slidable longitudinally to bring their free ends into and out of overlapping closing position. Both gates must be held open at the same time to permit passage of pills through the opening. Patent No. 3,561,591 issued to Edward Henderson, 220 Central Park, New York, N.Y. 10019.

Color television. A display system to eliminate all the present poor features of home color television. The invention consists of a modulator designed to control simultaneously the light intensity of hundreds of optical fibers, in three sets, and to project the straight line that they form across a screen, creating a complete color television picture. There is no picture tube and none of the internal phosphors that form the colors. Patent No. 3,567,847 issued to Edgar E. Price, 648 Applegrove Circle, Webster, N.Y.

Dual wheel. A dual wheel with adjacent rims with a drop center in which independently inflatable tire segments are in alternately staggered relation, allowing a single segment to be readily removed and repaired. Patent No. 3,561,821 issued to Samuel C. Pellegrino, 1297 Hertel Avenue, Buffalo, N.Y. 14216.

Ski towing device. An installation for ensuring the departure sequence of skiers towed along a path defined by a continuously moving ski lift cable. A mechanism is provided which automatically responds to the movement of a skier past a predetermined point for individually positioning the tow bars in releasable engagement with the moving ski lift cable. Patent No. 3,561,366 issued to Jean Pomagalski, 116 Avenue de l'Eygala, 38 La Tronche, France.

Bathing cabinet. A bathing cabinet with openings at the top and front portions with a connectable door and a horizontal movable seat. The seat moves under the influence of a hydraulic ram and water flows through a valve system to the various sprays within the cabinet. Patent No. 3,562,821 issued to Carl J. Queen, 5310 Peachtree-Dunwoody Road, Atlanta, Ga. 30305.

Abstracts and drawings of patents are published as they are issued in the *Patent Official Gazette* each Tuesday. More than 1,800 patents are issued each week. Trademarks are published in the *Trademark Official Gazette*. Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Science Calendar

April 20-23—Orlando, Fla.—Fifth Florida Industries Exposition Inventors Congress. Produced in cooperation with Commerce's Office of Inventions and Innovations, National Bureau of Standards, and the Patent Office.

April 27 — Philadelphia — National Bureau of Standards Seminar at Franklin Institute Research Laboratories, 20th and Benjamin Franklin Parkway. Cosponsored by Commerce and the Institute.

May 10-14 — Gaithersburg, Md. — National Bureau of Standards conference on: Flow—Its Measurement and Control in Science and Industry. Cosponsors: American Institute of Physics, American Society of Mechanical Engineers, ISA.

May 24-26 — Gaithersburg, Md. — National Bureau of Standards. Fourth Joint Meeting of Operations Researchers. Cosponsors: College on Logistics of the Institute for Management Sciences; Mathematical Society of America, American Society for Cybernetics, American Society for Public Administration, Association for Computing Machinery, and the Operations Research Society.

June 16-18 — Gaithersburg, Md. — National Bureau of Standards, Summer Symposium in Analytical Chemistry. Cosponsor: American Chemical Society.

June 21-24, 1971—Washington, D.C. —Fifth Symposium on Temperature, Its Measurement and Control in Science and Industry, Sheraton Park Hotel. Sponsors: American Institute of Physics, the Instrument Society of America, and the National Bureau of Standards.

April 19, 1971

International Commerce

- Secretary on trade visit to six nations
- Quarterly world market report issued
- Mexican economy continues impressive growth
- Belgians buying from U.S. at record pace
- Thailand looks around for new markets

Commerce Brings Export Story To Businessmen Around Country

Newsmemo

The get-up-and-go quality of the American businessman figures strongly in an optimistic forecast for the 70s submitted by Business Abroad editor John Roach to the recent Cleveland World Trade Conference. He expresses confidence for several reasons, but first "because the real action toward increasing profits through world trade commences with the basic entrepreneurial spirit and management expertise that for so long have been the distinguishing trademarks of American business on all continents."

Both short-term and long-term sales opportunities are in the minds of a trade mission to the Soviet Union being sent out next month by the National Machine Tool Builders' Association. The association has been working with the Commerce Department on its plans for the promotional trip. The schedule includes a briefing at the Commerce Department shortly before departure.

Company professionals interested in rounding out their education with studies abroad will find a new guidebook of the Institute of International Education useful. It is the fifth edition of IIE's "Handbook on International Study for U.S. Nationals." One chapter lists awards for study and research in overseas institutions, another describes programs of interest to specialists that mix study and training with stints of voluntary service and employment. The IIE, at 809 UN Plaza, New York 10017, sells the guide at $7 per copy. A companion volume, "Handbook on International Study for Foreign Nationals," is to be published later this year.

GAPA--Gross American Product Abroad. This term will come into use if international economists take up a suggestion by Russell F. Anderson, who heads McGraw-Hill's international publications division in London. He assesses GAPA, the total of what U.S. multinational companies produced abroad last year, at $200 billion. The time is fast approaching, he believes, when such operations must be judged as a pattern of development quite distinct from business trends in the U.S. or in the individual countries.

Export of services was the unusual theme for a conference this month in Hawaii sponsored by the State's world trade promotion unit--which is named, appropriately, the Hawaii International Services Agency. Hawaiians aspire to a major position of influence in Pacific Basin commerce. Question: where to concentrate beyond sales of sugar, pineapples and a relatively few manufactures? Answer: in export of the talents of engineers, agricultural experts, food marketers, tourism developers, all with good ethnic backgrounds in the Pacific lands.

International Trade Winds

PLASTICS—LNP (Liquid Nitrogen Processing) Corp., Malvern, Pa., has concluded a licensing agreement with James Ferguson & Sons Ltd., London, for the production and marketing of glass reinforced thermoplastic compounds in the United Kingdom and Ireland. Under the contract, Ferguson is granted the use of all LNP know-how and technology for product formulation, processing, quality control and marketing of the engineering plastic materials. Construction of an English manufacturing facility in Merton is underway and should be completed this summer.

BANKING—The Bank of America, San Francisco, becomes one of the first U.S. financial institutions represented in New Caledonia when it joins with Banque et des Pays-Bas of Paris and island investors to form a new bank in Noumea, New Caledonia, a French territory. The California concern will have a 30 percent share in the new venture, known as Banque de Paris et des Pays-Bas Nouvelle Caledonie.

STEEL—Armco Steel Corp., Middletown, Ohio, has formed a new company with an Italian industrial group composed of Techint and Landini. The firm, Armco Moly-Cop S.p.A., will produce grinding balls for the mining industry at facilities to be constructed at Cividale del Friuli, about 60 miles north of Venice. Production is scheduled to start there in July 1972, with output aimed mainly at European customers.

PAPER PRODUCTS—Scott Paper Co., Philadelphia, formed a new firm in Brazil with Companhia Auxiliar Empresas de Mineracao. The new organization, Productos de Papel, S.A.-Propasa, will manufacture and market consumer household paper products and will be headquartered in Rio de Janeiro. Scott will also erect a paper mill in Cruzeiro, State of Sao Paulo, to make products for the Brazilian market.

ELECTRICAL SYSTEMS—REFAC Technology Development Corp., New York, has licensed Nihon Dennetsu Co., Ltd., Tokyo, to use the Linderode Spark-Erosion System developed by Linderfort, Ltd. of Bletchley, Bucks, England. The license covers an advanced electrical generating system which replaces the relaxation circuit method found in conventional spark-erosion machines.

Secretary Visiting 6 Nations For Trade, Investment Talks

Secretary of Commerce Maurice H. Stans is making an official visit to six nations in Europe and the Middle East from April 17 to May 4, to discuss matters of international trade and investment.

The Secretary's itinerary includes Ireland, Spain, Greece, Romania, Iran and Austria.

"We have bilateral trade and investment interests with each of these nations, and in these talks we will continue the efforts we have undertaken throughout the world to strengthen our country's commercial ties with other nations," the Secretary said.

Secretary Stans added that he will put particular emphasis on the importance of maintaining a secure, healthy climate for American investments in the countries visited.

He also said he will discuss with each the need for continued global efforts to reduce and eliminate non-tariff barriers to international trade.

Meeting national leaders

Secretary Stans will meet with the head of state in each nation he visits, and he will present to each a message from President Nixon conveying the United States' interest in strengthening trade and investment relations with other nations.

He will be the first U.S. Secretary of Commerce to visit Romania.

Secretary Stans met with Romania's President Nicolae Ceausescu during the latter's visit to Washington last year, and his visit to Bucharest will, he said, "mark an extension of President Nixon's continued interest in the possibility of expanded two-way trade and investment opportunities with Eastern Europe."

He said the Bucharest visit will be for the purpose of continuing discussions in exploring expanded commercial relations with Romania, and to that end will cover the full range of future trade and investment possibilities.

Secretary and Mrs. Stans will be accompanied by Assistant Secretary of Commerce Robert McLellan; Deputy Assistant Secretary Lawrence Fox; Robert M. Smalley, Special Assistant to the Secretary; Arden Chambers, Confidential Assistant to the Secretary; and Tom McSpadden, Special Assistant to Assistant Secretary McLellan.

The itinerary: Dublin, April 18-19; Madrid, April 19-21; Athens, April 22-24; Bucharest, April 25-26; Tehran and Isfahan, April 27-30, and Vienna, May 1-3.

Commerce Using New Approaches In Telling Export Story Nationwide

Aiming its how-to-export story at the eyes as well as the ears of U.S. businessmen, the Commerce Department is now busy with new audio-visual presentations to audiences across the country.

One of the latest is a 16 mm. color sound motion picture that shows how a U.S. overseas trade exhibition can be used by a new-to-export firm. The photo on Page 33 depicts a session of the Rhode Island World Trade Conference in Providence last month at which this movie was shown by a Commerce Field Office specialist.

Titled "Show And Sell," the film was produced by the International Trade Communications and Research Institute (ITC), of Los Angeles. Although it deals specifically with Commerce's Stockholm Trade Center, the techniques and benefits described pertain to all Commerce overseas exhibitions.

ITC, a non-profit organization, has produced ten films on foreign trade used extensively in university and college classes on international trade, and in workshop seminars by Commerce Field Offices. The Southern California Regional Export Expansion Council acts as adviser to the Institute.

Plans are now under way to present the films on educational television, an approach to export education successfully employed by the British Broadcasting Corp.

Another Commerce effort in the audio-visual area is a new program of functional slide presentation for use by Commerce Field Offices at seminars, conferences, business meetings, and university courses.

Commerce's Bureau of International Commerce has equipped 35 Commerce Field Offices with slide projectors and companion tape players. For use with them is a 26-minute presentation, "Partnership for Profit," produced by the Bureau to describe export assistance available to U.S. firms, and including a series of export success stories.

"Partnership for Profit" will be followed by a series of shorter presentations in specific areas. The first, concerning the advantages of containerization, will be distributed to Commerce Field Offices later this spring. Plans also include presentations on the export assistance services of commercial banks and of combination export managers.

Business Seminar Scheduled

A seminar on Doing Business in Latin America will be held May 19-22 in Gainesville, Fla. Among the participants will be Vincent D. Travaglini, Director of the Bureau of International Commerce's Foreign Business Practices Division.

Write: Registrar, The Institute of Continuing Legal Education, 417 Hutchins Hall, Ann Arbor, Mich. 48104

Export Flags Fly At Four Concerns

PUBLISHER GETS 'E'—*Arthur C. Rutzen, left, presents Carl Ruderman with an "E" for Henry M. Snyder & Co.*

In four ceremonies from New York and Ohio to Florida, three "E" awards and one "E" Star were presented to three exporters and a financial institution.

Amimpex, Inc. of Miami received an "E" for exports of 'package-deals' involving the planning, sales, installation and servicing of institutional equipment for hotels and other enterprises such as hospitals, colleges, airlines and restaurants. Amimpex, meaning American Import-Export, is eight years old and employs 14 in Miami. Amimpex operates a bilingual training program, advertises in foreign languages, and features liberal export credit terms.

The magazine and book publishing firm of Henry M. Snyder & Co. Inc. of New York has an "E" for increasing exports by 50 percent over a three-year period. Part of Snyder's work includes preparing low-cost international editions and creating a marketing program involving the dissemination of materials geared to specific overseas markets.

The third "E" recipient was Vineland Laboratories, Inc., Vineland, N.J., manufacturer of pharmaceuticals, biological products and specialized veterinary equipment used in raising poultry and livestock.

The Central National Bank of Cleveland was presented with an "E" Star at the Cleveland World Trade Conference. Since 1962, the Bank has tripled its international staff and expanded its trade assistance and information services, including establishing a foreign exchange trading operation. The Bank has a branch in Nassau, the Bahamas, an equity investment in Deltec Panamerica, and in French and Dutch merchant banks.

AMIMPEX CITATION—*With the Miami firm's "E" are William L. Pallot, president of the Board of International Trade of Miami, Hugo Garin, Amimpex vice president, Thomas E. Drumm, Jr., Ombudsman for Business, Special Assistant to the Secretary of Commerce, and Roger J. LaRoche, Director of Commerce's Miami Field Office.*

VETERINARY, BANKING ENTERPRISES—*In the picture to the left, Ferrar Renzulli and David Henriquez display Vineland Laboratories' "E" flag. Above, I. Barry Thompson of the Central National Bank of Cleveland and Charles B. Stebbins, Cleveland REEC, hold the Bank's "E" Star award.*

U.S. Sales, Share Up In Most Key Markets

Import demand throughout the world continued at high levels in 1970 as consumption and output soared in most industrial nations and improvements in the foreign exchange positions of developing countries enabled them to boost purchases abroad. A third or more of the 12 to 13 percent increase in free-world imports, however, reflected higher prices. These developments created a favorable climate for the marketing of U.S. products. Faced with sluggish business conditions and lagging sales at home, U.S. exporters were able to capitalize on the situation and to improve their competitive positions in most major markets. Booming domestic demand and shortages in Western Europe also favored U.S. shippers.

The developed nations bought heavily abroad throughout most of 1970, with the majority of West European countries and Japan importing at the fastest rates in recent years. Among major traders, Japan, the Netherlands, and Germany each increased imports by at least one-fifth. Developing countries followed suit but at a more subdued pace.

The marked improvement in the U.S. share of the Japanese market was a highlight of our trade performance last year. Although Japan's economy continued to grow vigorously, an easing in consumer demand and a decline in the rate of fixed business investment gave rise to concern with oversupply as the year progressed. Despite these conditions, Japanese imports of U.S. goods climbed by 36 percent. As a result, our share of that market rose to 29.5 percent, its highest level since 1964.

With Japanese steel production at a record high in 1970, imports of U.S. coal advanced by about $250 million to nearly $600 million. Large quantities of coal were also being stockpiled. The increase in steel output generated a sharp rise in demand for U.S. ferrous scrap as well. Stepped-up purchases of aircraft, including three new jumbo jets, and of lumber added to the overall expansion. Japanese traders also increased their imports of soybeans, corn, and wheat from the United States.

American exporters did almost equally well in France, where imports from this country rose by nearly 30 percent, more than three times faster than from all other sources. Although French economic growth leveled off and overall demand slackened, U.S. goods flowed in at a rapid rate. The national airline took delivery of four jumbo jets and the increasing use of computers throughout the business community created a strong market for systems made in this country. Meanwhile, local shortages boosted imports of U.S. coal, nonferrous metals, and steel, mostly in primary forms. French demand increased especially for aluminum as its use widened. In addition, the opening of a large crushing plant last year prompted a rapid expansion in imports of soybeans.

A report on the value of total imports into all of the major free-world foreign markets for which current statistics are available, and the U.S. share of those markets, is published quarterly in* Commerce Today. *The preceding report appeared in the Jan. 25 issue.

The article and accompanying table are prepared by the International Trade Analysis Division of the Commerce Department's Bureau of International Commerce.

The U.S. position also improved in the German market as our share rose to 11 percent, recovering some of the ground lost since 1967. The 26 percent expansion in arrivals centered in aircraft, steel, computers, and soybeans. Deliveries of the new jets accounted for a significant portion of the increase. The upsurge in steel imports stemmed from the rapid expansion in consumption which forced German firms to look abroad to meet their requirements for steel plates, ingots, and blooms. Meanwhile, widening applications of computers in business and scientific research stimulated demand for the large U.S. models, a demand that extended also to parts for assembly and to peripheral equipment.

U.S. share up in Spain

Rising at more than double the rate for imports from other sources, Spanish purchases of U.S. goods increased by 23 percent to reach $900 million in 1970. On the strength of this surge, our share expanded to 18.9 percent, the largest portion held by the United States in any West European import market. While an advance import deposit scheme, in effect through 1970, was designed to curb overall demand for foreign goods, it did not deter Spanish importers from buying larger quantities of U.S. steel, coal, soybeans, electric measuring and controlling instruments, and computers.

The Netherlands and Switzerland also boosted imports from the United States last year, but our relative position did not improve significantly in either market. Substantial gains in shipments of soybeans and corn accounted for much of the expansion in Dutch purchases. The rise in Swiss imports from U.S. sources was more widespread, extending to power-generating machinery, organic chemicals, steel, electronic computers, and tobacco.

Climbing at a faster rate than total imports, Australian purchases

from this country increased by 14 percent last year. The United States thus retained its principal supplier position as our share rose to 25.4 percent. Continued high level of investment in the mining industry spurred imports of U.S. industrial tractors and construction and mining machinery. At the same time strong consumer demand stimulated purchases of our automotive goods, particularly in the form of parts and engines for local assembly.

Major increases in private consumption and fixed investment and a high rate of inventory accumulation led to a substantial rise in imports by South Africa. Purchases from the United States advanced slightly faster than in 1969 but at a lower rate than those from other sources. Machinery, especially construction, mining, and materials handling equipment, and organic chemicals accounted for much of the 14 percent rise in imports from the United States. The gain was partially countered, however, by reduced deliveries of civilian aircraft and automotive equipment.

The U.S. position declined in two of its largest markets, Canada and the United Kingdom. Both setbacks, however, were minor. Canadian import demand weakened in 1970 as the restrictive measures designed to contain inflationary pressures dampened economic expansion. The depressed auto market in both Canada and this country slowed trade in automotive equipment and was the main reason for the 3 percent decline in the inflow of U.S. goods. In Britain, moderate growth in output and continued restrictions on consumption limited the expansion of demand for foreign merchandise. Purchases from the United States rose by a modest 4 percent, less than half as much as those from other suppliers. Increased imports of steel products, wheat, and chemicals contributed to the $110 million gain. Further growth was contained by a sharp fall in deliveries of U.S. military aircraft.

World Market

The 50 markets shown below accounted for 91% of 1969 imports into

Values in millions of dollars — Published

Country	1969 Imports			1970 Imports January through latest month				Import change in latest available 12-month period*		Reserves at end of fourth quarter	
	From world	From U.S.	U.S. share %	Latest month	From world	From U.S.	U.S. share %	From world %	From U.S. %	1969	1970
Germany, Fed. Rep.	24,926	2,618	10.5	Dec.	29,826	3,293	11.0	+20	+26	7,129	13,610
United Kingdom	19,936	2,706	13.6	Dec.	21,724	2,816	13.0	+ 9	+ 4	2,527	2,827
France	17,373	1,466	8.4	Dec.	19,119	1,897	9.9	+10	+29	3,833	4,960
Japan	15,025	4,094	27.2	Dec.	18,881	5,564	29.5	+26	+36	3,654	4,839
Canada	14,221	10,314	72.5	Dec.	14,029	9,976	71.1	− 1	− 3	3,106	4,679
Italy	12,467	1,418	11.4	Dec.	14,939	1,543	10.3	+20	+ 9	5,013	5,299
Netherlands	10,992	1,067	9.7	Dec.	13,391	1,308	9.8	+22	+23	2,529	3,234
Belgium-Lux.	9,989	766	7.7	Dec.	11,351	915	8.1	+14	+19	2,388	2,847
Sweden	5,909	508	8.6	Dec.	7,005	609	8.7	+19	+20	696	762
Switzerland	5,286	448	8.5	Dec.	6,483	552	8.5	+23	+23	3,995	4,701
Australia	4,545	1,136	25.0	Dec.	5,091	1,292	25.4	+12	+14	1,261	1,692
Spain	4,234	728	17.2	Dec.	4,749	897	18.9	+12	+23	1,282	1,817
Denmark	3,798	293	7.7	Dec.	4,384	327	7.5	+15	+12	446	484
South Africa, Rep.	3,291	571	17.3	Dec.	3,915	653	16.7	+19	+14	1,397	1,011
Norway	2,942	232	7.9	Dec.	3,697	267	7.2	+26	+15	712	807
Austria	2,825	84	3.0	Dec.	3,549	121	3.4	+26	+44	1,537	1,757
Hong Kong	2,457	330	13.4	Dec.	2,898	381	13.2	+18	+15	(1)	(1)
Brazil	2,265	682	30.1	May	925	275	29.7	+ 5	+ 9	657	1,187
India	2,209	603	27.3	Sept.	1,582	470	29.7	− 6	− 6	926	1,006
Yugoslavia	2,134	92	4.3	Nov.	2,587	144	5.6	+32	+74	253	140
Mexico	2,078	1,298	62.5	Sept.	1,815	1,154	63.6	+16	+21	662	744
Singapore	2,040	161	7.9	Dec.	2,461	266	10.8	+21	+65	244	292
Finland	2,023	103	5.1	Dec.	2,637	137	5.2	+30	+32	359	480
Korea, Rep.	1,824	530	29.1	Nov.	1,700	490	28.8	+ 4	+10	553	610
Venezuela	1,751	878	50.1	June	893	449	50.3	+ 6	+ 8	933	1,021

Note: The countries shown above include the 50 major importers of U.S. merchandise in 1969 for which current data are available. In order to present comparable statistics for all countries, import data have been adjusted from an f.o.b. valuation to a c.i.f. valuation for Australia, Canada, the Republic of South Africa, and Venezuela. Reserves include official holdings of gold and foreign exchange, the gold tranche position, and, beginning January 1970, Special Drawing Rights (SDRs) in the International Monetary Fund.

Mexico remained the largest U.S. market among developing countries, accounting for about 12 percent of our shipments to such areas. Imports from the United States climbed by more than one-fifth during 1970 despite a slowdown in the growth of the Mexican economy. Stepped-up purchases of machinery reflected higher investment expenditures, while a sharp rise in auto sales induced a larger inflow of parts for local assembly. Imports by state enterprises focused on electric-generating machinery, on railway equipment, and, because of drought-depressed crops, on corn and other agricultural commodities. Arrivals of civilian aircraft also climbed sharply, as did those of electronic components for assembly in Mexico.

Singapore recorded a 65 percent increase in imports of U.S. goods last year. Transistors, other semiconductors, and excavating equipment parts—all shipped for assembly by subsidiaries of U.S. companies—and floating equipment for oil exploration made up the bulk of the rise. Oil-field equipment also contributed heavily to a sharp expansion in Nigerian purchases from the United States during 1970. Meanwhile, Pakistan's imports of U.S. products advanced by nearly 50 percent, due mainly to increased arrivals of civilian aircraft and of wheat under P.L. 480

Report Bureau of Int'l Commerce

all free-world foreign markets and 94% of imports from the U.S.

quarterly

Country	1969 Imports			1970 Imports January through latest month				Import change in latest available 12-month period*		Reserves at end of fourth quarter	
	From world	From U.S.	U.S. share %	Latest month	From world	From U.S.	U.S. share %	From world %	From U.S. %	1969	1970
Greece	1,594	152	9.5	June	923	57	6.1	+ 9	−21	317	310
Argentina	1,576	346	21.9	Oct.	1,394	348	25.0	+ 8	+15	538	672
Iran	1,535	215	14.0	June	826	109	13.2	+14	+10	311	209
Ireland	1,413	126	8.9	Dec.	1,569	110	7.0	+11	−13	691	696
Israel	1,318	311	23.6	Oct.	1,173	265	22.6	+15	+10	412	449
Portugal	1,296	63	4.9	Dec.	1,556	107	6.9	+20	+70	1,444	[2]1,468
Philippines	1,254	358	28.6	Nov.	1,101	324	29.4	− 4	− 3	121	251
Thailand	1,230	189	15.3	Sept.	965	144	15.0	+ 2	− 3	985	916
Taiwan	1,213	292	24.1	Nov.	1,340	321	24.0	+36	+28	443	624
Pakistan	1,011	246	24.3	Dec.	1,129	361	31.9	+12	+47	325	199
New Zealand	1,003	121	12.1	Dec.	1,245	167	13.4	+24	+37	113	126
Malaysia[3]	916	53	5.7	Sept.	786	54	6.9	+18	+34	680	733
Chile	902	349	38.7	....	....	....	....	+21	+22	344	388
Turkey	754	128	17.0	Sept.	634	118	18.6	+ 5	+16	245	431
Nigeria	696	82	11.8	Sept.	728	112	15.4	+40	+70	138	226
Colombia	686	312	45.5	....	....	....	....	+ 7	− 3	221	206
Libya	676	126	18.7	....	....	....	....	+ 5	+16	918	1,590
Viet-Nam, Rep.	668	258	38.7	Aug.	372	159	42.8	−25	+ [4]	227	225
U.A.R. (Egypt)	638	45	7.1	June	407	27	6.6	+26	+47	145	135
Peru	601	186	30.9	Nov.	578	187	32.4	+ 6	+25	167	[2]312
Trinidad & Tobago	483	71	14.7	Nov.	493	80	16.3	+15	+19	45	[2]40
Jamaica	442	185	41.9	Apr.	160	66	41.4	+16	+28	141	164
Panama	294	107	36.4	June	162	62	38.1	+18	+19	182	[5]230
Ecuador	262	85	32.4	Sept.	183	61	33.1	− 3	− [4]	65	83
Costa Rica	245	86	34.9	June	148	50	33.9	+29	+16	29	16

* Compared with preceding 12-month period.
[1] Not available. [2] End of November. [3] Import data are for West Malaysia only. [4] Less than 0.5 percent. [5] End of September.
Source: Official trade statistics of listed countries. International Monetary Fund, *International Financial Statistics*.

programs. Significant share gains characterized the U.S. trade performance in these markets.

Our position improved considerably also in several Latin American countries, most notably in Peru and Argentina. In the Far East, the only gain in the U.S. share occurred in the Republic of Korea, while minor losses were reported in Hong Kong and Taiwan.

German reserves soar

As of Dec. 31, 1970, official reserves of the 50 major U.S. trading partners exceeded $70 billion, including slightly over $3 billion in Special Drawing Rights (SDRs) which accounted for around a fifth of the 30 percent gain from the previous year. The holdings of most of the countries shown in the accompanying table increased during 1970, with those of the developed nations responsible for some 85 percent of the rise. A shift in funds from private to official holders and, to a lesser degree, the distribution in January of Special Drawing Rights by the International Monetary Fund were the principal factors in the expansion.

Germany led all countries by a wide margin in boosting reserves, nearly doubling its holdings to $13.6 billion. Relatively high interest rates during most of the year, a strong trade surplus, and reduced long-term capital exports all contributed to the unprecedented rate of reserve accumulation. By the end of 1970, U.S. dollars comprised more than one-half of German reserves.

Canada was the second largest gainer in official holdings during 1970 with an increase of nearly $1.6 billion, representing a boost of 50 percent. A record trade surplus, buoyed by exceptionally large wheat sales, and capital inflows were the prime factors.

Japan and France each raised holdings by more than $1 billion to near the $5 billion mark. Another resounding trade surplus, most of it in the first and fourth quarters, was responsible for the reserve gain in Japan. An influx of capital, reflecting renewed confidence in the franc, provided the main thrust for France. The increase would have been even larger had not France discharged a substantial number of debts during the year.

Switzerland boosted reserves by more than $700 million in 1970, as did the Netherlands. Proceeds from banking services and tourism easily offset an unusually large Swiss merchandise trade deficit. Meanwhile, speculation that the guilder might be revalued drew capital into the Netherlands.

Libya led all developing countries in the accumulation of holdings, almost entirely on the strength of revenues from oil. Brazil's reserves topped $1 billion by the end of 1970, thanks to a sharp rise in exports and stepped-up inflows of capital lured by relative economic and financial stability. Venezuela's holdings, too, exceeded $1 billion by the end of the year, and several other countries in the area also appreciably enhanced their reserve positions, some of them with substantial help from SDRs.

Countries losing holdings were few. The Republic of South Africa incurred heavy losses, as did Pakistan, Yugoslavia, and Iran. The decline in South African reserves was largely due to a sizable trade deficit.

Trade Fairs, Centers

Shows In Five Overseas Markets Provide Openings For U.S. Sales

Italy's booming electronics industry, which exceeded $700 million in 1970, is spurring new demands for modern testing and measuring equipment for that sector. More than 25 percent of the Italian measuring and testing market is supplied by American firms.

An exhibition helping U.S. producers and suppliers expand or enter this market is scheduled for the U.S. Trade Center in Milan, Sept. 4-9, coinciding with the International Electronic Components and Measuring Instruments Show (ANIA).

ANIA will be held at the Milan Fair Grounds adjoining the U.S. Center and is organized by the Italian National Association of Electrical and Electronic Equipment Industries.

Call Robert Wallace, 202-967-4508, Department of Commerce, BIC-944, Washington, D.C. 20230, or contact any Department Field Office.

Precision parts, components

Growing at approximately 12 percent a year, the United Kingdom's electronic market is providing expanding sales opportunities for American manufacturers and suppliers of electromechanical precision parts and components.

Assisting U.S. firms in their export activities to the U.K. will be an exhibition of this equipment at the U.S. Trade Center in London, Sept. 13-17.

The British market is expected to consume $140.6 million worth of passive components this year, and demands are expected to increase annually by 9 percent. Total British consumption of all electronic components is estimated at $681.8 million for this year, up from a 1970 total of $533.3 million.

Sophisticated components are needed to serve the British domestic consumer market for electronic products such as color television, and for the increasing production of computer equipment.

Contact Lee Swift, 202-967-4461, Department of Commerce, BIC-942, Washington, D.C. 20230, or any Commerce Field Office.

Plastics

Approximately 2,000 plastics manufacturers in Germany are prime targets for the U.S. exhibition at Kunststoffe '71, the German Plastics Trade Fair, Sept. 16-23 in Duesseldorf.

Annual German per capita consumption of plastics—100 pounds—is the highest in the world. With new applications, especially in the construction and automobile production industries, consumption will increase. An expansion of the use of plastics is also anticipated in interior decorating.

In 1970, German plastics production was estimated at 4.5 million tons. This figure is projected doubling by 1975, and should reach 15 million tons by 1980.

American firms will display the latest developments in plastics machinery and tools, semi-finished goods and raw materials in Kunststoffe.

Call George Kemp, 202-967-3088, Department of Commerce, BIC-938, Washington, D.C. 20230, or contact any of the Department's 42 Field Offices.

Industrial machinery

As the Republic of Korea faces growing demands to increase its manufacturing efficiency, sales of U.S. equipment are expected to rise. Last year, Korea purchased more than $630 million worth of equipment from American firms.

Aiding companies in increasing their share or enter this market will be an all-U.S. display of industrial machinery at Seoul, Oct. 18-23. This will be the second U.S. Solo Exhibition in Seoul. The first was mounted in May 1969, and recorded $8 million in off-the-floor orders. An additional $5.8 million in sales was written during the first year following the show.

Product categories include: scientific control, testing and measuring instruments, machine tools and metalworking equipment, office machinery and computers, power hand tools, food processing and packaging equipment, medical apparatus and pharmaceuticals, and pumps, valves and compressors. Other product lines for exhibit are: coalmining equipment and refrigeration and air conditioning units.

For information on the Second U.S. Industrial Machinery Exhibition, contact Robert Levine, 202-967-4705, Department of Commerce, BIC-936, Washington, D.C. 20230, or contact any Department Field Office.

EDP equipment

Europe's EDP market was estimated at $2 billion for 1970; the forecast for 1974 is $3.6 billion.

To further penetrate Europe's growing market for hardware, peripherals, software and computer facilities, accessories and related equipment, Commerce will sponsor an American pavilion for firms to display their products at Systems '71 in Munich, Germany, Nov. 30-Dec. 3. Other national pavilions are being sponsored by France and Germany. Prior to the show, Commerce will stage a 13-nation market promotion.

Germany, the host country, will be the prime market, as it is the largest single country EDP market in Europe. In 1970, Germany was

estimated requiring $568 million in equipment; by 1974, this need is anticipated reaching $1.15 billion.

In addition to providing 50 percent of Germany's EDP market, U.S. manufacturers and their German affiliates have supplied 84 percent of that nation's total installations.

In cooperation with the Munich Fair Authority which sponsors Systems '71, the Association for Computing Machinery will stage a series of lectures, panels, discussions, and seminar/workshops.

Call Andre Williams, 202-967-2425, Department of Commerce, BIC-938, Washington, D.C. 20230, or contact any Department Field Office.

Textile Machinery Mission Will Visit Eastern Europe

A trade mission comprised of manufacturers and suppliers of textile machinery is being organized by the Commerce Department to visit the USSR, Poland, and Czechoslovakia, June 30-July 12.

Stops in Moscow, Warsaw, and Prague are scheduled; Lodz and Brno also are being considered.

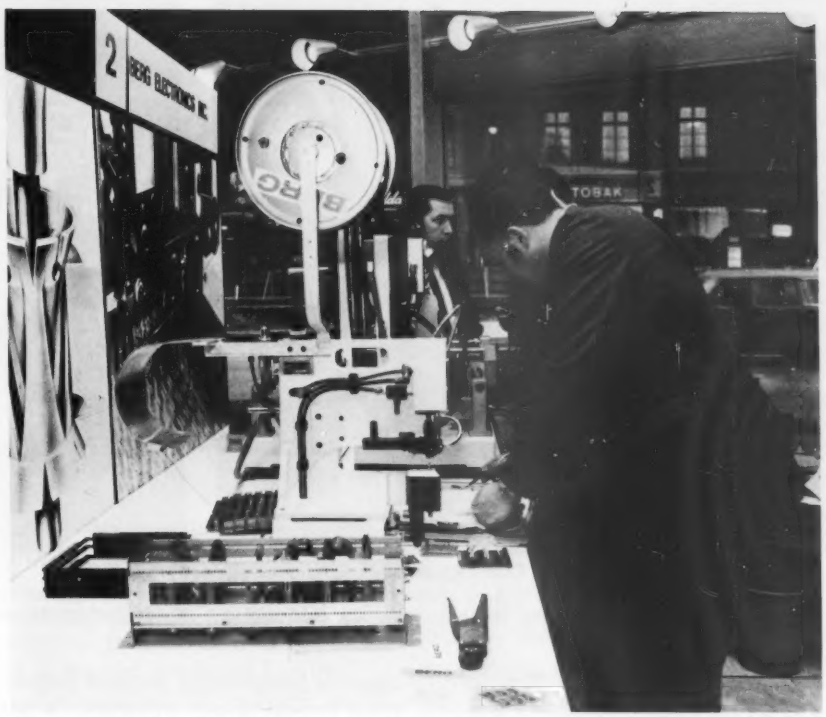
The Department will pay operating costs and provide an advance officer and a mission director. Members will pay transportation and living expenses. The group will be limited to ten members.

Some of the participants are expected to be from U.S. companies exhibiting at the International Textile Machinery Association show in Paris June 22-July 1.

For additional details, write: Trade Missions Division, BIC-926, U.S. Department of Commerce, Washington, D.C. 20230.

Italy, Netherlands, Ireland Plan Future Trade Shows

Two 1971 fairs and an October 1972 event are open to U.S. participants. The Commerce Department has not scheduled a major promotion for any of these events.



ONE OF 87—*Berg Electronics, one of 87 participants in a display of electronic components at the U.S. Trade Center for Scandinavia, reported making several trade leads at the exhibition. A total of 1,545 Nordic businessmen registered for the show.*

Bari, Italy will host the 35th International Bari Levant Fair, Sept. 9-20. This annual event featured 8,592 exhibitors from 42 nations, including 57 U.S. firms, at the 1970 edition of this general fair. Write: Vittorio Triggiani, Pres., Ente Autonomo del Levante, Lungomare Starita, 70123 Bari.

From Sept. 14-18, the international Sanitation and Hygiene Exhibition will take place in Rotterdam's Ahoy Hall. The first edition of this event was staged in 1970 and featured more than 200 firms. Write the fair's U.S. representative: Mariport 71, 1601 Lafayette Blvd., Detroit, Mich. 48216.

The Irish Construction Industry Federation is sponsoring an international Building and Construction Exhibition in Dublin, Oct. 3-7, 1972. The 1970 fair drew 27,000 visitors to its five exhibition halls. Write: Irish Services Ltd., 15 Upper Fitzwilliam St., Dublin 2.

Electronic Components Show In Scandinavia Features 87 Firms

Eighty-seven American firms, the largest group of participants in a show at the U.S. Trade Center for Scandinavia, were represented at a display of electronic components, Feb. 22-27.

Sales for the first year, based on contacts made at the Stockholm show, are estimated reaching the $10 million mark. Six agents were appointed during the promotion and a total of 28 candidates were under consideration for other agency/distributorship positions. The show and its accompanying seminars drew an audience of 1,545 businessmen from the Scandinavia nations.

Topping the show's sales columns were Illinois Tool Works, Inc. of Chicago with $1.6 million, and Quality Communications, Inc., Santa Fe Springs, Calif., with $1 million.

OVER THE COUNTER AND COFFEE—*Japanese marine engineers watch a demonstration of heat shrinkable electrical seals and splices at the Raychem Corp. booth in February. Over coffee,*

Frank J. Sposato of Logimetrics. Inc., converses with a Japanese visitor in the Businessmen's Lounge of the U.S. Trade Center in Tokyo during the electronics test and measuring show.

Technical Shows In Tokyo Feature 67 U.S. Firms

Two technical exhibitions at the U.S. Trade Center in Tokyo are estimated returning more than $6.4 million to 67 American manufacturers and suppliers during the coming year.

A display of test and measuring equipment for the electronics industry was staged Jan. 25-30, followed Feb. 22-27 with an exhibition of oceanographic, shipbuilding and marine equipment and instruments.

The January show closed with four agents and distributors appointed and with one American firm considering another candidate to represent its product line. Over $2.4 million in first year orders are anticipated resulting from the promotion.

Fourteen firms entered the Japanese market through the test and measuring equipment show, four of which were new to exporting. Attendance for the exhibition reached 2,184.

Almost 2,000 businessmen from Japan's marine and related industries attended the February U.S. Trade Center show in Tokyo. Twelve-month orders for equipment are expected to top $3.8 million.

Two of the show's 29 exhibitors were interested in contacting representatives; two were appointed, and negotiations with 14 additional prospects were in progress as the promotion ended.

Two New York Concerns Make Top Sales At U.K. Audio-Visual Aids Show

American-made training aids for business and industry drew 1,849 British visitors to an exhibition at the U.S. Trade Center in London, Feb. 22-26. The 24 exhibitors are reporting more than $4.1 million in expected sales in the next year.

Eight companies sought agency/distributorships; five were signed, including two sub-agents. Negotiations with seven other potential representatives were in progress after the show.

Projecting $2 million in first year orders were officials of Retention Communication Systems, Inc., New York, for its cartridge-loading projector. Royal Sound Corp., Freeport, N.Y., introduced its telex tape duplication system to British buyers, reported $500,000 in future sales, and appointed an agent for the United Kingdom.

ROYAL SOUND'S CENTER—*Introducing its telex tape duplicating center to British buyers was Royal Sound Corp.*

Continued Stable Growth Seen In Store For Mexico

The Mexican economy has for a number of years been characterized by both growth and stability. This is also the prospect for 1971, as seen by the U.S. Embassy in Mexico City. The performance of the economy during the past year, however, foretells a number of problems for the new Government of President Luis Echeverria, who took office last December.

Preliminary statistics issued by the Bank of Mexico indicate a 7.5 percent real growth in the GDP during 1970. Inflation, however, became a major concern as the wholesale price index for Mexico City increased by 6 percent (as compared with 2.6 percent in 1969). Although gross foreign exchange reserves increased by $102 million to a record level of $820 million at the end of the year, the trade deficit was also a record, over one billion dollars.

New policies

The Echeverria Administration has announced a number of new policies designed to promote socio-economic development of the large marginal sector of the Mexican society. Several of these policies are likely to result in increased production costs for industry and have been criticized by businessmen. Nevertheless, the outlook for U.S. sales to Mexico in 1971 is again very good, particularly in the area of capital goods. U.S. exports to Mexico in 1970 rose to $1.58 billion or 64.2 percent of the market compared with 62.4 percent in 1969, and Mexico remains the fifth largest U.S. market.

Preliminary data indicate that the Mexican trade deficit reached an all time high of slightly over one billion dollars in 1970. Imports increased by 18 percent to $2,456 million; exports, on the other hand, showed a 1.2 percent decline from 1969 levels to $1,368 million. A substantial part of the value increase in imports may be attributed to higher prices in supplier countries. Several other factors, however, are also involved. The private sector, for example, invested greater amounts in new machinery and instruments; and a strong rise in automobile sales resulted in increased importation of parts not produced locally.

However, while private sector imports increased by 13 percent in 1970 as compared with 5 percent in 1969, government imports increased 37 percent as compared with 3.5 percent the previous year. Imports by state enterprises during 1970 were especially high in electric generating equipment, railway equipment and even agricultural products, growing conditions having been adverse for some key food crops.

The only countries showing significant gains in sales to the Mexican market in 1970 were the United States and the United Kingdom. West Germany retained second place with 7.5 percent, the same as in 1969. Japan dropped from third place to fourth, behind France, as its sales to Mexico dropped by about one-third.

The failure of Mexico to increase exports during 1970 was almost entirely due to problems in the agricultural sector. Increases were registered for tomatoes, strawberries, coffee and meat, but these were more than offset by significant decreases in exports of cotton and corn. Corn production in the 1969-70 growing season was substantially hurt by drought; cotton production in the same period declined for a number of reasons including drought, insect damage and reduced acreage. As a result, Mexican exports to Europe and Japan, which traditionally consist largely of cotton and grains, decreased significantly in 1970 and the share of Mexican exports received by the United States rose to 70 percent (from 66 percent in 1969). The value of Mexican exports also suffered from price declines for sulphur, copper and lead.

Manufactured goods continue to be a bright spot in Mexico's export picture. According to preliminary estimates, these were up some 15 percent in 1970 and now comprise about 34 percent of the total. Products showing significant gains were chemicals, machinery and automotive parts.

Healthy trade increase

Mexico's trade with LAFTA again showed a healthy increase over the previous year. However, in this area also imports increased more rapidly than exports and the favorable balance of trade was cut from $33 million to $28 million. On the basis of strong sales of automotive parts to Venezuela, that country moved into fourth position among purchasers of Mexican products after the United States, Japan and West Germany.

Mexico has traditionally offset its negative balance of trade through net gains on tourism and border transactions, plus new investment and foreign borrowing. In 1970, according to the Bank of Mexico, the country netted $709 million on tourism and border transactions, some 10 percent over 1969. However, on tourism alone, the net gain was only 7.6 percent against an increase of 8.9 percent in gross earnings, an indication that Mexicans continued to travel abroad at a rate faster than visitors came to the interior of Mexico.

Although Mexico's international credit standing remains excellent, concern is being expressed in

MEXICO KEEPS MOVING — *The economy grew at a 7.5 percent pace in real terms last year. Above, a view of the Paseo de la Reforma in Mexico City.*

private and public circles regarding the high level of foreign debt, both long and short-term. There was faster amortization of long-term debt in 1970 than in 1969, and the total of new debt of this type was somewhat lower. The short-term debt apparently increased substantially, but as foreign interest rates go down the Mexican authorities can be expected to convert much of this to medium and long term, as they have done with short-term debt in the past.

A Mexican Institute of Foreign Trade has just been created to coordinate and promote exports. The Institute is expected to centralize the Government involvement in exports previously assigned to seven different agencies.

The new Administration has also increased taxes 10 percent on "luxury" articles, such as vacuum cleaners, phonographs, cosmetics, sporting goods and automobiles priced at over $4,160. Regulations concerning depreciation, capital gains (real estate) and advertising expenses have been tightened. Social Security contributions by employers were also increased in an effort to reduce large government outlays in this area. Sugar prices were increased some 50 percent in order to cut back on heavy subsidies to the sugar industry and to provide funds for extensive revitalization of the industry.

Production costs will unquestionably be affected in 1971 by new taxes, higher component prices, and greater labor costs resulting from the Labor Law of May 1, 1970. Accordingly, some opposition to the President's economic policies has been expressed by the private sector, particularly in regard to increased taxes. Business activity, particularly in retail sales, has slowed during the first two months of 1971, and a degree of uncertainty is being expressed within business circles. Some companies have already found it necessary to reduce their labor force.

While this uncertainty should prove to be temporary, it is likely to mean some deferral of new investment and marketing programs. Furthermore, large companies for whom the impact of higher labor costs (including larger Social Security contributions) may mean significant overall cost increases, are likely in future investments to stress labor-saving machinery.

Investment still welcome

U.S. private direct investment in Mexico now totals approximately $1.8 billion. While the Mexican Government is expected to continue to give high priority to "Mexicanization," meaning majority local ownership of new industry, Government spokesmen have repeatedly emphasized that foreign investment is welcome in Mexico and will receive equitable treatment. Preference will be given to investments which take the form of joint ventures and which result in the growth of technology and of exports. Wholly-owned foreign investment, however, is not precluded when merited by special circumstances. The one type of investment which the Mexican Government discourages is foreign purchase of an existing local firm.

Mexican exports should show a reasonable increase in 1971 as agricultural production improves. While exports of cotton and grains are not expected to return to 1969 levels, there could be some increases over 1970.

While imports may be affected by a slightly uncertain business attitude, the overall outlook is for a continuing strong market for U.S. goods. Imports of consumer goods will continue to be limited, although a slightly better market than in previous years may exist, since the Government has announced its intention to reduce import protection in an effort to combat contraband and promote greater efficiency.

Imports by the public sector will almost certainly not increase as rapidly in 1971 as in 1970, and concern over debt increases will limit foreign borrowing. Continued or increased inflation would result in more restrictive monetary and credit policies. On the whole, however, the continuing emphasis on industrialization and further public and private investment indicate that the Mexican economy will again expand in 1971, though probably at a somewhat slower rate than in 1970.

A United States Trade Center, now under construction in Mexico City, is scheduled to be inaugurated in October 1971. The first exhibition by the Trade Center, scheduled for late 1971, will feature packaging machinery. Prospects for greater sales for this machinery in Mexico should be excellent.

Other opportunities

Other areas which offer significant opportunities for U.S. exporters are as follows:

► A solo exhibition by the Department of Commerce in November, 1970 of advanced office equipment resulted in off-the-floor sales of $2 million plus an estimated $13 million sales for the next twelve months. Mexican businessmen at

all levels are becoming increasingly aware of the utility of this equipment and sales potential should remain high.

► An increased emphasis on automated production and quality control should strengthen the already excellent market for technical instruments.

► While the Mexican steel industry continues rapidly to increase its production, specialty steels and castings continue to be in demand, as well as scrap iron and scrap steel.

► The Mexican chemical industry continues to expand rapidly. Imports of salts and oxides will further decline as a result of local production, but this should be more than offset by increased demand for pharmaceutical reagents and synthetic resins, fibers, and other raw materials.

► The Government has announced that extensive replacement of machinery and equipment will be necessary to rebuild the sugar industry.

► Electric power consumption in Mexico increased by 12.5 percent in 1970. The Federal Electricity Commission has a number of additional new projects planned for the next several years, including Mexico's first nuclear power plant at a cost of $100 million.

U.S. products are well known and accepted in Mexico. Exporters will continue to face strong competition, however, from Europe and Japan in both price and credit facilities. In 1971, as in previous years, some U.S. firms will find that Mexico has placed import restrictions on products they have traditionally supplied to this market. Accordingly, they must then decide whether to forego the market or to produce in Mexico either under license or through direct investment. New investors may encounter pressure from the Government to establish their operations in less developed parts of the country, in fulfillment of the policy of decentralization.

U.S. Firms Aim To Keep Gaining Bigger Share Of Belgian Market

The year 1970 was a banner one for U.S. exports to Belgium. According to provisional figures, Belgium-Luxembourg (BLEU) imports from the United States amounted to over $998 million, an increase of some $231.6 million (30 percent) over 1969, itself a boom year. Imports were up in almost every major product category.

Peter F. Frost, Assistant Commercial Attache at the U.S. Embassy in Brussels, has reported to the Department of Commerce that the value of total BLEU imports in 1970 came to approximately $11.35 billion. This represented an increase of about 12 percent over the 1969 total of just under $10 billion. Although Belgium's primary suppliers continue to be her other Common Market partners, particularly West Germany, France and the Netherlands in order of importance, U.S. products captured an increased share of the Belgian market in 1970.

Trade turnaround

Reversing, at least temporarily, a generally downward trend over the past several years, U.S. sales last year accounted for 8.8 percent of the BLEU import market. This figure represents an increase of a little more than one percentage point over the 1969 level and about 0.8 of a percentage point over the average market share for the period 1966-1969.

While it is, of course, too early to predict whether this slightly improved position will be maintained or bettered in the future, the fact that U.S. exports in 1970 contained two items of clearly exceptional nature—the delivery of two Boeing 747's and higher than normal coal sales—and the prospect of a mixed outlook for the Belgian economy in 1971 lead one to conclude that this will not be easy.

The provisional figures show that the BLEU exported approximately $11.6 billion worth of goods in 1970, an increase of almost 13.2 percent over the $10 billion of total exports in 1969. Principal export categories were: chemical products, textiles, precious stones and jewelry, base metals, machines and equipment and transport material. As in the case with Belgian imports, a large share (68.5 percent) of the country's export trading was with Common Market neighbors.

Sales to U.S. decline

The percentage of Belgium's total exports destined for the United States has declined markedly over the past several years and in 1970 accounted for only 6 percent of total export sales. Major categories shipped to the United States in 1970 were: chemical products, textiles, precious stones and jewelry, base metals and transport material—largely automotive items shipped from the Ford and GM (Opel) Belgian assembly plants.

With the exception of dwindling supplies of coal, Belgium is generally short of raw materials. She must import large quantities of raw materials and semi-finished goods which she processes for internal consumption and re-export. Belgium has traditionally imported slightly more than she has exported and has thus had a small annual trade deficit. However, in 1969 and again in 1970 the traditional pattern was reversed. Belgium enjoyed favorable trade balances of $76 million in 1969 and $243 million in 1970.

Certain technical considerations—price increases on export items during the last two years and inventory destocking in the face of impending Value Added Tax (VAT) in late 1970—make it difficult to determine whether a

PORT OF ANTWERP—*Complete facilities are available for the handling of container cargo. Imports into Belgium from the U.S. neared $1 billion last year.*

new basic trend in BLEU trade patterns is being established. Nevertheless, there has recently been certain published speculation by financial sources that such a trend is indeed taking place and that it can be linked to "structural changes in overall exports" caused by the installation in the country of many foreign firms, the majority of whose output is exported.

Impact on U.S. trade

Whatever the outcome in the long-term BLEU trade balance, if "structural changes" in the traditional export mix are taking place, there are likely to be certain immediate implications for U.S. trade: a continued shortrun growth of exports of semi-finished products by American parent firms to their Belgian subsidiaries until such time, probably well in the future, as the production of these subsidiaries gets sufficiently large to make it economical to produce these items locally; and increased resources for the purchase of consumer items in which the United States certainly has a lead.

On the other hand, the continued growth of exports from Belgium by foreign companies—many of which are American-owned—will mean steadily increasing competition for U.S. exporters both within the European Economic Community and in other markets.

On Jan. 1, Belgium adopted a Value Added Tax in conformity with the policy of the European Economic Community. Also applied to imported items, the VAT is roughly equivalent to the former Transmission Tax, which it replaces. There are currently four VAT rates:

► *Low rate* (6 percent)—applicable to foodstuffs, poultry, ores, water, soap, newspapers and books, original art, antiques, pharmaceuticals, and natural gas.

► *Intermediate rate* (14 percent)—applicable to tobacco, lubricants, oil, textiles, shoes, etc.

► *Normal rate* (18 percent)—applicable to all items not otherwise defined as being subject to a special rate.

► *Luxury rate* (25 percent)—applicable to automobiles, motorcycles, aeroplanes, yachts, watches, radios, television sets, perfumes, and alcoholic beverages.

In order to avoid a rash of unjustified price increases following the initiation of the VAT, the Belgian Government has put a three to five-month hold on all applications for price increases in certain key sectors. This has worked hardship on some importers, who, faced with price increases imposed by their overseas suppliers since the first of the year, have not yet been able to adjust their sales prices accordingly. It is to be expected, however, that after the first quarter of 1971 there will be an easing in this restrictive policy, especially as it applies to imported products where the requested price changes are solely the result of foreign supplier price increases.

The somewhat conflicting preliminary forecasts as to the probable evolution of the Belgian economy during 1971 and the rather unusual nature of some items of U.S. exports during 1970 make for a mixed outlook for total American exports to Belgium during the coming year. On the positive side, the Belgian Central Economic Council has recently forecast a continuation in 1971 of the upward trend in economic activity which Belgium has enjoyed for the last several years, but at a slightly slower rate than in 1970. This group has tentatively placed the expected growth in real gross national product at 4 percent in 1971 compared with 5.5 percent in 1970.

Belgium's economic well-being is, however, very much tied to her foreign commerce and particularly to her exports to other members of the Common Market. As the governments of some of these countries have taken certain measures to cool off somewhat overheated economies, certain Belgian banking sources foresee that demand from these countries will fall off, affecting the expansion of Belgian exports. On the other hand, Belgium experienced appreciably less inflation in 1970 than did her neighbors, which should improve the competitive position of Belgian products.

On the domestic scene, banking sources predict that demand for

consumer goods will grow, although at a lesser rate than in 1970. Growth of this demand is expected to be about 4 percent as against 5.5 percent in 1970. The Central Economic Council has estimated that while investments by Belgian enterprises in plant and equipment will be less than during the previous two boom years, they will nevertheless grow at about 5 percent during the year. The Council also reports good prospects for the continued growth of foreign investments in Belgium in 1971, notably in the sectors of steel, metal fabrication, automobile assembly, electric construction, chemicals, textiles and food processing.

Despite the good prospects for continued short run growth of exports of U.S.-made semifinished products as a result of the possible "structural changes in overall exports" mentioned elsewhere in this article, the possible cyclical downturn in Belgian exports in 1971 makes the outlook for the sale of such items during the coming year somewhat doubtful.

Sales of items destined for direct consumption in Belgium or for processing for local consumption should do fairly well in 1971, although it is perhaps too much to expect that the levels reached in 1970 will be maintained. Sales of U.S. manufactured capital equipment destined to sustain the expected continued growth of domestic and foreign (including an appreciable number of American firms) investment should hold up well, although again perhaps not equal to 1970 levels.

Some of the best prospects for exporters are: office machine parts; unwrought aluminum alloys; fork lift trucks, etc.; pesticides and disinfectants; statistical machines; sound equipment; transistors and other electronic equipment; indoor game equipment; sound recording tape and records; hand saws and blades; electrical insulating products; and chemical and paper products and synthetic yarns.

Exchange Losses Spur Thai Search For New Markets

Thailand will have to find new markets for its limited list of primary products, improve the quality of exports, facilitate increased tourism and promote a higher rate of foreign investment, reports the U.S. Embassy in Bangkok, if the economic growth rate is to be boosted back to former levels.

The country's rate of economic growth in 1970 was lower than had been expected—in the neighborhood of 6 percent in real terms instead of the 8 percent predicted. External pressures, including the unsettled military situation in the area and falling world market prices for Thailand's major exports were accompanied by internal pressures resulting from lower income to the agricultural sector, falling wholesale prices and reduced levels of government revenue. The Government has taken a cautious approach, expanding the budget at a much lower rate than usual and shifting emphasis slightly from development to security expenditures.

Trade deficit rose

Thailand's trade deficit increased again in 1970, but only by about 2.5 percent to approximately $550 million. While this exceeded the 1969 deficit of $540 million, compared to the 7.7 percent increase in the deficit from 1968 to 1969 it was a welcome change. While exports remained at almost the same level, imports rose only marginally (about 0.5 percent) and much less than their usual rate (7.8 percent in 1969).

The Government has interpreted this encouraging development as being mostly due to import duty increases introduced July 1. This view is substantiated by figures for the second half of the year which show that (a) the volume of imports decreased by about 20 percent below the first half, a much stronger decline than usual, and (b) the value of imports for that period was almost 10 percent below the same period in 1969. The deterring effect of the new duty rates is clearly seen when contrasted with the trend during the first 6 months of 1970, when imports increased almost 6 percent over the same period in the previous year.

Thailand lost $128 million in foreign exchange reserves in 1970, by far the most in recent years and much higher than the 1969 loss of $48 million. Major factors were the very large merchandise trade deficit, and the fact that the other sectors of the balance of payments did not perform as well as usual.

The services sector is usually a large contributor to Thai foreign exchange income and in recent years has been growing at a rapid pace. This trend was reversed in 1970, however, and net earnings, while positive, were about 8 percent below those of 1969. The number of tourists increased impressively (by 33.8 percent to a new high of 628,671 in 1970) but this was insufficient to compensate for reduced tourist spending per capita, substantially reduced earnings from services to U.S. forces, and larger services payments.

The much less satisfactory performance of the capital sector was probably the most noteworthy change from 1969. Although there was a small increment in private foreign investment, the central government capital position declined considerably and the net "errors and omissions" line, which is usually heavily on the positive side, fell sharply in 1970. Part of this change might be accounted for by speculative capital outflows and repatriation of capital.

Most importers of American products have been gloomy on local market demand since last year's tax and import duty in-

crease. Even among products not directly affected, there has been a general softening of demand due to what is referred to as a business slowdown. Part of this reaction is only relative and probably also only temporary, however, because the nation's import needs remain great.

Preliminary estimates, in fact, indicate that U.S. sales to Thailand in 1970 may have been close to $200 million, as in 1969. While final figures are likely to show Japan edging even closer toward a 40 percent market share, the United States should retain second place among suppliers with 15 or more percent. Industrial machinery and equipment, transportation and construction equipment, and tobacco and cotton remain big sales categories for American suppliers.

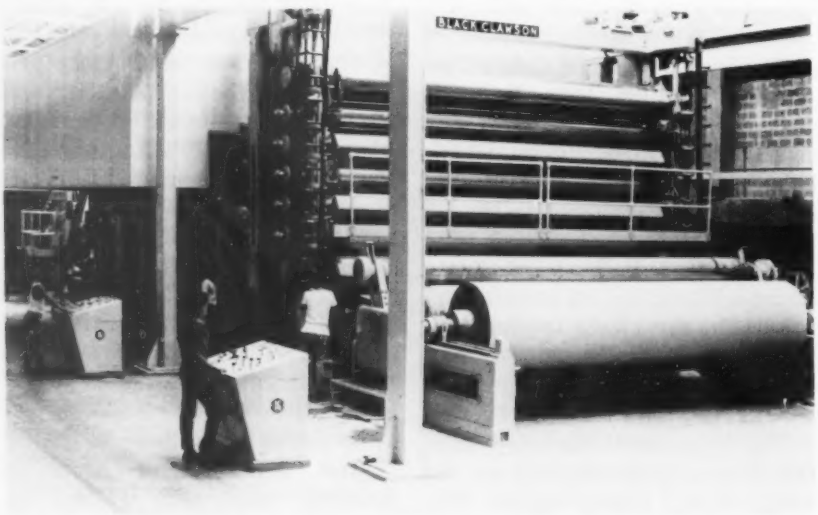
While the national development budget has declined slightly for the current fiscal year, the building and expansion of the nation's infrastructure will by no means cease. U.S. sales possibilities are still good in such fields as communications, electric power development, and transportation.

Thailand has also been an important buyer of American military and related support equipment and supplies. A growing Thai defense budget offers opportunities for U.S. manufacturers not only to expand sales to the Thai Ministry of Defense but also to insure a steady volume of follow-on orders for parts by their local agents.

It is true that government spokesmen have not ruled out the possibility of taking further steps to cut imports. Nevertheless, the Government at this point seems to be trying to solve the balance of trade and payments deficits through positive measures to increase exports rather than through further dampening the economy with more duty increases or import controls.

To maintain and enlarge the U.S. sales volume to Thailand in 1971, American suppliers must do well on more "big-ticket" items, both public and private. On these types of purchases, the total package, including after-sale services, becomes more important than unit price alone and financing terms are often the key to the sale.

American companies that can meet or beat foreign credit terms can continue to do well in this market. New, flexible Eximbank participation programs offer opportunities for U.S. suppliers to win a bigger share of a total Thai import market that should still grow but at a slower pace than in the late 1960's.



THAI IMPORT NEEDS ARE GREAT—*U.S. sales to Thailand totaled close to $200 million again in 1970. This U.S. machine makes bag paper at Siam Kraft.*

Filipino Efforts At Stabilization Show Progress

Since the inauguration of its stabilization program in February 1970, the Philippine Government has maintained firm controls on the economy and has so far prevented any revival of the internal and external borrowing practices that contributed largely to the current economic crisis. Most short-term debt to the United States has been satisfactorily stretched out to 1975 and beyond. While the exchange rate still "floats" officially at about P6.43 to $1.00, it no longer is permitted to fluctuate freely. The money supply has essentially been stabilized.

Side effects

The U.S. Embassy in Manila goes on to report, however, that the stabilization of the economy continues to have painful side effects, and the troubles are not over. For 1970, inflation reached 21 percent; it is expected to exert upward, although probably substantially less drastic, pressure throughout 1971. Inflation coupled with restricted credit has not only slowed down less essential production but has hurt investment in newer and potentially more significant industrial growth areas. Overall production has been disrupted moreover, by an unusual combination of bad weather and industrial and student unrest. Despite these problems, agriculture did achieve some growth, and the mineral sector continues its impressive advance.

Unemployment has increased under these depressed conditions. Out of a labor force of some 13 million, the unemployment rate is unofficially estimated at 8-9 percent. Continued high population growth and the consequently increasing labor supply suggests more problems for the near future.

Officially, the GNP real growth

rate declined to 4.4 percent for 1970, a per capita rate of about 1.3 percent. Lower than anticipated rates of savings and capital formation and the resultant suspension of investments will depress the recovery rate. Although improved exports could brighten the picture, the present outlook is for only a slight improvement in the real growth rate during 1971, to perhaps 5 percent.

In the last few months the Philippine balance of payments situation has responded extremely well to the remedial measures applied to the economy since February 1970. Merchandise exports, according to preliminary data, increased from $840.8 million in 1969 to $1,014.8 million in 1970, or by 20.7 percent. Imports decreased from $1,104.6 million to $1,039.5 million, a decline of about 6 percent. Overall foreign exchange transactions recorded a surplus for the year of $110.7 million.

Although much of the improvement in exports was the result of good weather in late 1969 and through 1970 until September, the de facto devaluation under the floating rate was a helpful factor. The new depreciated exchange rate also helped slow down imports, particularly from the United States, which declined from $320 million in 1969 to $305 million in 1970. Philippine imports from Japan rose from $337 million in 1969 to $432 million in 1970.

Trading difficulties

The decline in Philippine imports from the United States may well continue. U.S. export difficulties are due in part to the depressed economy and Philippine Government measures taken to remedy its difficulties. For example, U.S. exporters will continue to have to contend with Central Bank credit restrictions, with restrictions on currency exchange and with Monetary Board efforts to confine the growth of imports to 5 percent.

These trading difficulties will be exacerbated if and when the Congress passes its proposed import ban. Reviving a proposal made by the House last year to limit luxury imports, the bill introduced this year has been amended—in one version—to include a ban on the import of "goods that compete with goods produced, or that could be produced, locally."

The U.S. share in the Philippine market has also been reduced in the face of increasingly stiff competition from the Japanese and to a lesser degree from the Australians. It is assumed that this competition will continue to grow.

Despite the limitations imposed by the state of the economy, the Philippine Government and competitors, prospects for U.S. sales exist in both the private and public sectors. Several major projects in refining, smelting, containerization, and agro-business were started in 1970 which offer good future trading opportunities.

Even greater opportunities may be available in the electrical equipment field in the next few years.

New competition

The U.S. trader may also face in the coming year the novel, if less economically significant, prospect of competition from Communist traders. Consideration of this prospect has been under discussion for some time, and a number of trade missions have already been exchanged.

Disinvestment problems for Americans in both parity (mainly natural resource) and non-parity areas are tending to grow in this unsteady investment climate. The Government has still not provided any very clear or specific guidelines. New investment under these conditions is understandably circumscribed and requires very careful investigation of the laws that presently apply and the changes which may occur in the near future in light of the Constitutional Convention in June and the expiration of the Laurel-Langley Agreement in 1974.

The Government has displayed more sophisticated awareness of the value of foreign investment, and its agencies concerned with it, particularly the Board of Investments, have acquired greater confidence in handling investment inquiries and establishing investment priorities. Within this framework, most interest in investment appears to be coming from Japan and much of it is in the form of loans rather than equity. Relative to other countries in the area, however, investment inquiries or projects would appear to be moving at a slower rate.

Filipinization move

The government's welcome to foreign investment continues to be couched in terms of minority holdings. Its effort to relax the 60/40 equity requirement of the Export Incentives Act has so far not prospered, and it has shown no interest in changing the requirement of the Investment Incentives Act that firms enjoying "preferred-industry" incentives be 60 percent Philippine-owned, and those foreign firms availing of "preferred-pioneer" incentives become 60 percent Philippine-owned within twenty years.

Congress revived and is pressing through an oil industry commission bill this session. Shortly after Congress began to move on this measure, seventeen "Filipinization" bills were introduced to Filipinize piggeries, bakeries, vegetables and so on. Although illustrative of mood, they are of less substance and are uncertain.

All these factors do not necessarily contradict the government's carefully delimited invitation to foreign investors, but they do tend to restrict further its appeal. The prospect is that the flow of direct investment into the Philippines during 1971 will barely match the outflow, if there is not, indeed, a net outflow.

World Trade Actions

France Relaxes Exchange Curbs; Spain Outlines Contract Procedures

France: In view of recent improvements in the economic situation, on March 16 Minister of the Economy and Finance Giscard d'Estaing announced the government's decision to relax exchange control restrictions. The tourist allowance for residents of France was raised from 1,500 to 2,000 francs ($364) in foreign exchange per person for each trip, up to a limit of two trips within the same year; the allowance for children was raised from 750 to 1,000 francs. The limit of 500 francs in French currency per person which tourists can take out of the country remains unchanged. In addition, certain minor technical changes were made in regulations governing payment for imports and repatriation of export earnings in order to reduce paper work.

Martinique, FWI: The labeling or overlabeling in the French language may help exporters in improving the saleability of their canned goods and of other containerized household products in the Martinique, Guadeloupe and French Guiana markets.

Spain: The Ministry of Public Works has published a Decree outlining General Administrative Clauses applicable to all contracts entered into by Government ministries or autonomous agencies.

The six chapters of the Decree cover: general provisions and the general relations between the Administration and the contractor; verification of the work layout and the work schedule; payment for work done, including measurement and evaluation; changes in the original contract, and supervision of the work; causes for cancellation of the contract, and penalties; and termination of the contract.

The provisions of Decree 3854, which became effective on March 1, complement the Government's General Contracting Law.

Iran: The Budget Law of Iranian Year 1350 (March 1971-March 1972) raises the registration of order fee on all import orders from 4 percent to 5½ percent of the value. Even though the Budget Law has not been passed, the Central Bank of Iran ordered all commercial banks to charge the higher fee effective March 28.

Mexico: The *Diario Oficial* of March 17 announced import duty reductions of 25 percent on some alcoholic beverages and 50 percent on others and a uniform reduction of 50 percent on dolls, toys and some parts thereof, as well as on gas-operated lighters.

Interested persons may obtain details of these tariff changes upon request to the American Republics Division (886) OICR, BIC, U.S. Department of Commerce, Washington, D.C. 20230.

Export Rights Denied British, German Firms

Seven firms and four individuals in London, and a firm and individual in Germany, in separate actions by the Commerce Department's Bureau of International Commerce have been denied U.S. export privileges.

The order restricting the British traders—for at least five years—was issued against Woodham Trading Ltd., Commodity Export Ltd., Politprude Ltd., and the individuals who control the firms, Gerald M. Hammerson and William R. Rumbold, based on the findings that they had violated the U.S. Export Control Regulations. To prevent evasion of the order, its restrictions are made applicable to four other firms controlled by Hammerson or Rumbold, or both: Glovet Traders Ltd., J. P. M. Spares Co. Ltd., G. M. T. Friction Materials Ltd., and Associated Electronics Buying Services, Ltd. Also subject to the order are Jack Meerloo and Frank C. Beven, agents for one or more of the firms.

System Technik GmbH of Frankfurt am Main, an importer and dealer in computer parts and accessories, and Bruno Kaelberer, one of the operators of the firm, have been denied U.S. export privileges as related parties to Johann Nitschinger and Comp-Data GmbH of Vienna.

Johann Nitschinger and Comp-Data have been subject to a U.S. denial order since April 1970. BIC found that System Technik and Kaelberer are closely connected with Nitschinger and Comp-Data. All outstanding licenses in which the related parties have an interest have been revoked.

Under the denial orders, the respondents, their agents, employees, and representatives are prohibited from participating in any transactions involving commodities or technical data exported or to be exported from the United States.

European Tax Briefing

Assistant Treasury Secretary Edwin S. Cohen is among the scheduled speakers at a briefing session on "European Taxes on U.S. Business" to be held by the American Management Association at its New York headquarters May 17 and 18.

The session, arranged with the International Fiscal Association, will treat tax situations in the Common Market, EFTA, France, Germany, Belgium-Netherlands-Luxembourg, the Scandinavian countries, Austria and Switzerland, Spain and Portugal, and the United Kingdom and Ireland.

Write: American Management Assn., 135 W. 50th St., New York, N.Y. 10020.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows, incorporating the familiar Licensing and Investment Opportunities and Foreign Trade Opportunities, presents details about licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies, appoint agents, major construction and expansion projects, and U.S. visits by foreign buyers.

Licensing, Investment Abroad

2433—ENGLAND—Fabricator of greenhouses and other structures is seeking licenses to produce automatic **fire sprinkler systems, environmental control systems for greenhouses, and food processing machinery.** Firm established in 1872, presently employs 500 people. F. H. Wykes, Dir., W. Richardson & Co. Ltd., Neasham Road, Darlington, Co. Durham, WTD. P-71143

2800—HONDURAS — Chemical specialties manufacturer for the Central American Common Market seeks license. Wants to produce **household and industrial paints, adhesives, polyvinyl acetate emulsions and alkyd resins.** Firm's principal products are detergents and soaps; employs about 400. Ing. Miguel Facusse, Quimicas Dinant de Centroamerica, S.A. de C. V., Apartado Postal 549, Tegucigalpa, D.C. WTD. P-71150

2821, 2851, 3479 — SWITZERLAND — Chemical producers seek manufacturing rights and licenses for the production of **plastic coatings, lacquers, paints and polyester raw materials.** In addition, **wants special chemicals for use in foundries,** particularly for manufacture of molds. The firm reportedly has modern machinery for the above products, maintains subsidiaries in West Germany and Austria and employs around 200. Dept. of Commerce, Office of International Investment, BIC-878, Washington, D.C. 20230. WTD. P-71147

2844—HONDURAS—Producer of **perfumes, cosmetics and other toilet preparations** for men and women seeks manufacturing rights. Firm established in 1964 and employs 50 people. Carlos Chahin, Almacen Don Juan, Apartado Postal 532, San Pedro Sula. WTD. P-71156

2844—JAMAICA — Producer of **suntan preparations** seeks joint venture. Seeks capital investment of approximately $600,000. Firm claims to have 30% of the Jamaican market; also sells to neighboring countries. Peter Ridley, Mng. Dir., Jamaica Chemical Co. Ltd., 159a Orange St., Kingston. WTD. P-71145

2891, 2899—ENGLAND—Firm seeks license to manufacture new and advanced products in the fields of **automotive chemicals, jointing compounds and adhesives.** Company is a diversified manufacturer and sales company. The managing director plans to visit the U.S. in May. H. G. Werrell, Mng. Dir., Hermetite Products Ltd., Tavistock Rd., West Drayton, Middlesex. WTD. P-71154

3391, 3452, 3589, 3714—THE NETHERLANDS—Producer of fabricated metal products seeks licenses to make **exhaust-fume purifiers, commercial garbage disposers and lubrication systems.** Firm also wants licenses for such items as **worm and bevel gears, ground and hardened shafts, brake valves and measuring units for gasoline pumps** which firm already produces. It is interested in representing manufacturers of **special fasteners and lubricants.** Company has three major divisions:—engineering plant, trading division, repair and overhaul department. Plant contains modern automatic machine tools and heat treatment equipment. Firm employs 280; 1970 sales of $3 million. L. H. J. de Bruyn, Gen. Mgr., Enkes, N. V., 60 Westvlietweg, Voorburg. WTD. P-71148

3522 — ENGLAND — Manufacturer of wood containers for collection, storage and distribution of horticultural products seeks license to produce **medium-sized agricultural machinery and implements.** Presently employs 120 people and is connected with the agricultural and horticultural community. D. A. Pask, Mng. Dir. Horticultural Containers Ltd., Highland Court Farm, Bridge Canterbury, Kent. WTD. P-71146

3548—SWITZERLAND—Firm seeks licenses to manufacture and distribute **service station equipment and automobile maintenance and diagnostic equipment.** Company produces and distributes automotive maintenance equipment and was established in 1970. Swiss firm will consider representing U.S. company prior to licensing. Wico-Technik AG, Nueschelerstrasse 31, 8022 Zurich. WTD. P-71159

3554—ENGLAND—Manufacturer of special purpose machinery seeks license to produce paper processing machines, such as **gumming, slitting, folding, embossing; packaging, box and bag making equipment. Textile rewind units and adhesive tape dispensers** also of interest. Firm was established in 1968 and presently has 70 employees. R. A. Vane, Dir., Pylon Developments Ltd., Staplehurst Rd., Sittingbourne, Kent. WTD. P-71155

3554—FRANCE—Manufacturer of such papermaking machinery as size presses, pop-rollers, impregnaters, coaters, winders, reelers and cutters. Seeks license to make **paper winding and unwinding machines and other papermaking and processing equipment.** Firm offers a license to manufacture its **paper unfolding rollers.** Company has 125 employees and reportedly has a sales organization extending to the Common Market and other European countries. Constructions Mecaniques P. Hanssen & Cie 67 Schweighouse s/Moder. WTD. P-71153

3573—GERMANY—License to manufacture **digital electronic equipment** such as peripheral equipment for computers. Firm produces components and equipment for the electronics industry, including measuring and testing instruments. DETRONIC, Dipl. Ing. Otto Detterer KG, 14 Murgstrasse, P.O. 545, D-7520 Bruchsal. WTD. P-71152

3585—ITALY — Manufacturer seeks licenses or joint venture to produce **refrigeration units** for supermarkets and stores. Firm presently manufactures refrigerated counters, cabinets, wall boxes and shelves for supermarkets and stores. Established in 1961, it employs 89. FRIZERGA S.p.A., Via Cal Trevisana, Vacil di Treviso (Treviso), Italy. WTD. P-71161

3641—GERMANY — Firm seeks license to manufacture **incandescent, fluorescent and discharge lamps;** presently produces and distributes lighting fixtures. Company established in 1963 and employs 30. Interlumen Lichtarchitektur GmbH, 51 Muehlenbach, 5 Koeln. WTD. P-71151

3714—INDIA—Manufacturer seeks financial and technical collaboration in the production of **automotive engine valves.** Firm presently manufactures forgings for automobiles, locomotives and diesel engines. Employs 176. Neelkanth A. Kalvani, Mng. Dir., Bharat Forge Co., Ltd., Mundhwa, P. B. No. 57 Poona-1. WTD. P-71142

4459—SINGAPORE—Sponsor sought to develop **sightseeing cruises for tourists** to see Singapore from the sea. Proposal calls for conversion of 80 and 100 foot sailing craft now used in coastal cargo to Chinese junks. Write: M. I. C. Bain, Member of Stock Exchange of Malaysia and Singapore and Exchange Brokers Assoc., and Director of Lyall and Evatt Stockbrokers, P.O. Box 320, Singapore 1. P-71149

5053 — BRAZIL — Corporation near Sao Paulo seeks joint venture for expansion and diversification of its activities as processor and distributor of packaged black beans, general importer and li-

censee for manufacture of grain driers and related equipment. Expansion would include further manufacture of **driers, cleaners and graders.** Foreign investor would have equal treatment with Brazilian investors including rights to acquire common and preferred shares and to occupy a seat on the Board of Directors. Packaged beans are sold to retail outlets in a growing market. Arno Glitz, Mng. Dir., Glitz Parana S.A., Comerico de Cereais, Av. Salgado Filho, 3805 (Caixa Postal 2596), Curitiba, Parana. WTD. P-71158

Licensing In U.S.

2522—FRANCE—A French manufacturer of wood and metal office **furniture** offers licensing agreements to an American firm. Due to certain patented parts, the products can be taken apart without difficulty. The line includes comfort chairs, accessory furniture, ministerial (elegant) series, desks, office chairs, etc. **File 2015**

2833—SWITZERLAND—A Swiss manufacturer of **carbohydrates, enzyme substrates, lichen acids and related substances** offers manufacturing rights to U.S. firms. **File 2016**

2844—JAMAICA—A Jamaican firm presently manufacturing and selling four **suntan oil products** seeks a licensing and sales arrangement. The products are being sold in Bermuda, Bahamas, Cayman Islands, the U.S., Puerto Rico, Virgin Islands, and the Netherlands Antilles. **File 2017**

3479—GERMANY—Manufacturer of galvanized, plastic coated, and other coated or plated cold-rolled steel sheet and strip wishes to make arrangements to license their methods of **plastic coating of metal strips and metal plating. File 2018**

3551—GERMANY—A reputable German firm has developed small-sized **packaging machinery** of special use to smaller and medium-sized food processors. Most of the machines employ automatic and semi-automatic filling and vacuum sealing processes. One employs deep drawing and thermo-molding to automatically make packages of plastic foil. The firm is interested in either a licensing arrangement or joint venture. **File 2019**

3623—FRANCE—Firm seeks a licensing agreement for the manufacture of **welding power supply units and parts** for the electronic and mechanical precision industries. They also have a tin reflow solderer with a temperature control at the soldering tool level. Both are designed to permit high production rates and are especially suited to the modern electronic assembly processes of today. They also offer welding heads designed for parallel and opposed welding as well as for reflow soldering. **File 2020**

3715—CANADA—A Canadian manufacturer offers to license the production rights to a **freight trailer with a rollback body** designed to protect transported goods against damage by rain, snow and sharp instruments. The trailer has a flat deck for ease of loading and unloading but can be covered in a matter of minutes. It eliminates the use of costly tarpaulins and since it can be loaded or unloaded in half the time of conventional flat decks, the manufacturer claims a substantial savings in costs. The trailer can be completely sealed and bonded. The company holds a patent in the U.S. and in Canada and is also willing to sell the patent outright. **File 2021**

Moroccan Firm Interested In Industrial Collaboration

SAMIR (Societe Anonyme Marocaine Italienne de Raffinage) is seeking U.S. collaborators for new industrial ventures in Morocco. The company, one of the largest oil refiners in the country, does not have a specific project in mind but wishes to be a partner in any industrial, agricultural or tourist investments.

The firm is prepared to participate in the capital of such joint ventures. It currently owns the Hotel SAMIR at Mohemmedia. Write: Paul Ohana, Manager, SAMIR (Societe Anonyme Marocaine Italienne Raffinage), Route cotiere 111, B. P. 89, Mohammedia, Morocco. WTD. P-71141

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and also assistance on overseas investments are available from the Office of International Investment, U.S. Department of Commerce, BIC-878, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

For additional information on opportunities to manufacture foreign firm's products in the U.S., described under "Licensing In U.S.", write Commerce's Office of International Investment, BIC-874, or call 202-967-2248 referring to the File Number assigned each opportunity.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.

N. Y. Firm Prints Five Lists On Nationalism

As an appendix to its research report on nationalism in Latin America, Business International Corp., New York, published five checklists for living with nationalism.

The checklists were derived from discussions among investors at a series of Business International-sponsored meetings, and constitute a pool of advice from investors on how to live with nationalism. Although the lists are directed toward Latin America, much of the material in them may be of worldwide interest.

The checklists may be made available to American Diplomatic and Consular posts.

Write: Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230.

Mauritanian Fishing Industry Provides New Opportunities For American Investors

Opportunities exist for American investors in activities related to developing the Mauritanian fishing port of Nouadhibou (formerly called Port Etienne) and the growing Mauritanian fishing industry. U.S. investments are encouraged in such activities as ship repair facilities, slipways, warehouses for spare parts, cold storage warehouses, sacking and packing facilities, hotels and housing.

Such investment might be tied to equity participation in any of the six fish processing companies at Nouadhibou, including two partly government-owned enterprises, SOMIP, which has a 150,000 ton per year fish meal plant and SOFRIMA, which operates facilities capable of freezing 15,000 tons of fish per year.

It is estimated that foreign freezing and factory ships may take as much as 750,000 tons of fish annually off Mauritania's coast. The Mauritanian Government plans to require that fish caught in Mauritanian waters be unloaded at Nouadhibou for processing. For further information write in French, if possible, to: Direction de la Peche, Ministere de la Peche et de la Marine Marchande, Nouakchott Mauritania.

Booklet On Housing Incentives Published by Venezuela

The Office of the Venezuelan Minister of State for Housing Development has published, in both English and Spanish editions, the booklet "Incentives for Investment in Housing Developments of Social Interest".

This 86-page publication includes an outline of the benefits created by recently passed resolutions and decrees containing incentives for housing development in Venezuela, a reproduction of the Official Gazettes on these actions plus a thorough explanation of them.

To obtain a copy, write to the Office of the Minister of State for Housing Development, c/o Banco Obrero, Edificio Cruz Verde, Caracas 1001.

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Business Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.

U.S. firms should also be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies are wanted only if specified.

Miscellaneous nonmetallic minerals, except fuels

14990—GERMANY—Chrysotile asbestos, all grades. Carl E. Brandes, Attn: N. von Badewitz (importer, dist., mfr.), 3000 Hanover, Walderseestrasse 4. WTD in prep.

Meat products

20110 — FRANCE — Offals. Etablissements Palagel (importer, dist.), 78, Montee des Soldats, 69-Lyon-Caluire. WTD in prep.

20119—ISRAEL — Hides, skins, pickled pelts. Exclusive agency. I. Sindler (dist., agent), Beit Yanai, P.O. Kfar Vitkin. Cable: Sindler Kfar Vitkin. WTD in prep.

Canning, preserving foods

20320—FRANCE — Ready-made dishes, other food preparations based on rice. Rizeries Perliz S.A. (importer, dist., mfr.), 113, av. Marechal Joffre, 66-Perpignan. WTD 3/71.

20331—GERMANY—All types of canned fruits, cocktails in different sizes of tins. Ludwig Spies, Attn: Ben Lange (importer, agent), 2000 Hamburg 39, Sierichstrasse 183. WTD 3/71.

20373 — FRANCE — Frozen meat, Etablissements Palagel (importer, dist.), 78, Montee des Soldats, 69-Lyon-Caluire. WTD in prep.

Beverage industries

20830 — LIBYA — Quotations for 2,000 tons barley flour in 25 kilo bags, quote c & f plus 2%. Asia Trading Agency (importer, agent), 11 Tobruk St., P.O. Box 1284, Benghazi. WTD in prep.

Broad woven fabric mills, cotton

22100—ITALY—Cotton fabrics, remnants. Gatti, Renato (dist.), Via Guido d'Arezzo 4, 20145 Milan. WTD in prep.

Office furniture

25220—PANAMA—Metal office furniture. Rodelag, S.A. (importer, agent, retailer), Box 4503, Panama 5. WTD 4/71.

Industrial chemicals

28150 — GERMANY — Binders, other chemicals for paint, varnish industries. Dien Chemie Rohstoffvertriebsges mbH (dist., agent), Furstenbergstr. 37, 6454 Grossauheim. WTD 3/71.

28183—GERMANY — Rubber processing chemicals. Dien Chemie Rohstoffvertriebsges mbH (dist., agent), Furstenbergstr. 37, 6454 Grossauheim. WTD 3/71.

Synthetic materials

28210 — ENGLAND — Chemical resin products selling to auto, general engineering industries. Hermetite Ltd. (dist., mfr., agent), West Drayton, Middlesex. WTD in prep.

Drugs

28332 — THAILAND — Medicinal chemicals, extracts, in bulk, such as aspirin powder, phenacetin powder, caffein citrate powder, laxtose powder, qualteria oil, eucalyptus oil. Requests literature, samples, c.i.f. Bangkok prices: exclusive agency. Devakam Apothecary Hall Co., Ltd. (importer, dist., mfr.), 309 Soi Kingpetch, Petchburi Rd., Bangkok. WTD in prep.

Soap detergents, cleaning preparations, perfumes, cosmetics

28424—FRANCE — Cleaning, polishing preparations. SAPAM (importer, dist., agent), 77, rue de Rome, 75-Paris 8e. WTD 2/70.

28445 — AUSTRIA — Cosmetics, toilet preparations, brand-name articles, for sale through perfumeries, cosmetics shops. Poly-Chemie, J.A. Mueller & Co. (importer, mfr., agent), Siegesplatz 14, A-1224 Vienna. WTD 3/70.

Plastic products

30790 — PAKISTAN — Plastic pipe of glass fiber base. Cosmopolitan Corp. (agent), Z. Shah House, 120 Motijheel Commercial Area, Dacca-2, East Pakistan. WTD 1/71.

30790 — SWITZERLAND — Concrete forms, forming equipment made from plastics or glassfiber reinforced plastic; novelty items. ISMA AG, Attn: Mr. Heller (dist., agent), P.O. Box 479, 1001 Lausanne. WTD in prep.

30798—SWITZERLAND—All kinds of genuine novelty plastics consumer products; do-it-yourself, hobby articles, plastics household goods, fast-moving consumer plastics goods. Ernst Mettler (importer, dist.), Dornacherstrasse 375, 4053 Basel. WTD 3/71.

Leather goods

31990—FINLAND—Saddlery and harness accouterments. Kilanto & Co., Leo Kr. Kilanto, Dir. (importer, dist., retailer), Lokkalantie 16, Helsinki 33. WTD 3/71.

Concrete, gypsum, plaster products

32721 — NIGERIA — Concrete pipe for road construction, building materials. The White House Products Ltd., formerly Alumanation Sales (Nig.) Ltd. (importer, dist., retailer), 388 Herbert Macaulay St., P.M.B. 1043, Yaba, Lagos. WTD 3/71.

32722—NIGERIA—Precast concrete products for road construction; building materials. The White House Products Ltd. formerly Alumanation Sales (Nig.) Ltd. (importer, dist., retailer), 388 Herbert Macaulay St., P.M.B. 1043, Yaba, Lagos. WTD 3/71.

32723—NIGERIA—Prestressed concrete products for road construction; building materials. The White House Products Ltd., formerly Alumanation Sales (Nig.) Ltd. (importer, dist., retailer), 388 Herbert Macaulay St., P.M.B. 1043, Yaba, Lagos. WTD 3/71.

Abrasive, asbestos, nonmetallic mineral products

32912 — MALAGASY — Diamond cut-off wheels (diamond lapidary blades) capable of cutting stones (hardness 7 to 8) 32"-47" in diameter. Correspondence requested in French. Compagnie Madecasse Commerciale (importer, dist., agent), 18 Rue Rainizanabololona, Boite Postale 567, Tananarive. WTD in prep.

Steel mill products

33127—PAKISTAN — Forty-one tons hardened, tempered and polished band saw steel strip with sheered edges in manufacturing coils; 15 tons steel strip for manufacture of hacksaw blades; 10 tons high sped steel for manufacture of power saw blades. Specifications available from Business Opp. Staff, BDC-541, Rm. 3515, Dept. of Commerce, Washington, D.C. 20230. Requests quotations c & f Karachi. Noor Industries (agent), 7 Morriswala Bldg., Bunder Rd., Karachi 2. WTD in prep.

Rolling, drawing, extruding of nonferrous metals

33512—PAKISTAN—Copper rod. Cosmopolitan Corp. (agent), Z. Shah House, 120 Motijheel Commercial Area, Dacca-2, East Pakistan. WTD 1/71.

33521 — IRAN — Aluminum cable, steel reinforced made in rolling mill. Stahl, Commercial & Engineering, Ltd. (importer, dist., agent), 487, Sepah Ave., Tehran. WTD 1/71.

33578—PANAMA—Power wire, cable. TECNO-Electrica Industrial, S.A. (importer, agent, retailer), P.O. Box 7137, Panama 5. WTD 4/71.

Cutlery, hand tools, general hardware

34231 — THAILAND — Mechanics' hand service tools, such as pliers, sockets, wrenches. Requests catalogs, c.i.f. Bangkok prices. Utility Electric Co., Ltd. (importer, dist., agent), 55/24-25 Phyathai Rd., P.O. Box 831, Bangkok. WTD 2/71.

34250 — FINLAND — Reels of bandsaw blades made of different kinds of high speed steels and of types for use by metalworking industries. Blade widths from ¼" to 1¼". Pertik Ky. Veikko Tikkanen, Mng. Dir. (importer, dist., mfr.), Ahertajantie 6 D, Tapiola. WTD 3/71.

34232 — SWITZERLAND — Novelty hand tools for do-it-yourself work, hobbies, labor-saving. Ernst Mettler (importer, dist.), Dornacherstrasse 375, 4053 Basel. WTD 3/71.

34292—FRANCE — Furniture hardware. SAPAM (importer, dist., agent), 77, rue de Rome, 75-Paris 8e. WTD 2/70.

34294—FRANCE — Builder's hardware. SAPAM (importer, dist., agent), 77, rue de Rome, 75-Paris 8e. WTD 2/70.

34294 — SWITZERLAND — All kinds of genuine novelty hardware for household use, do-it-yourself work, hobby hardware articles. Ernst Mettler (importer, dist., Dornacherstrasse 375, 4053 Basel. WTD 3/71.

34295 — FINLAND — Saddlery, harness hardware. Kilanto & Co., Leo Kr. Kilanto, Dir. (importer, dist., retailer), Lokkalantie 16, Helsinki 33. WTD 3/71.

34295—FRANCE—Other hardware including trunk and luggage; fireplace fixtures, equipment; hose fittings, couplings; refrigerator, stove hardware. SAPAM (importer, dist., agent), 77, rue de Rome, 75-Paris 8e. WTD 2/70.

Fabricated structural metal products

34430 — SWITZERLAND — Special containers, tanks for liquid helium, other gases used for deep cooling systems. W. Stolz AG, Attn: Mr. Herkommer (agent), 8968 Mutschellen. WTD 6/70.

34440 — SWITZERLAND — Concrete forms of all kinds for use on construction sites, related equipment. ISMA AG, Attn: Mr. Heller (dist., agent), P.O. Box 479, 1001 Lausanne. WTD in prep.

Fabricated metal products

34940—SINGAPORE—Full range of liquid, gas control valves. T.H.L. Arrowsmith, Mng. Dir., Bestobell Singapore Pvt. Ltd. (importer, dist., agent), 11 Tractor Rd., Jurong, Singapore 22, or G.P.O. Box 64, Singapore 1. WTD 2/71.

Engines, turbines

35111 — IRAN — Gas turbine generator sets, household. Stahl, Commercial & Engineering, Ltd. (importer, dist., agent), 487 Sepah Ave., Tehran. WTD 1/71.

35193 — IRAN — Engines; diesel, semidiesel. Stahl, Commercial & Engineering, Ltd. (importer, dist., agent), 487 Sepah Ave., Tehran. WTD 1/71.

35193—PAKISTAN — Air/water cooled diesel engines. Cosmopolitan Corp. (agent), Z—. Shah House, 120 Potijheel Commercial Area, Dacca-2, East Pakistan. WTD 1/71.

35195 — PANAMA — Outboard motors. Abernathy, S.A. (importer, agent, retailer), Box 3501, Panama 1. WTD 4/71.

Construction, mining, materials handling machinery, equipment

35316—SWITZERLAND—Vibrators, other concreting machinery for use on construction sites. ISMA AG, Attn: Mr. Heller (dist., agent), P.O. Box 479, 1001 Lausanne. WTD in prep.

35480 — SWITZERLAND — Binding apparatus for concrete reinforcing steel nets, similar applications. ISMA AG, Attn: Mr. Heller (dist., agent), P.O. Box 479, 1001 Lausanne. WTD in prep.

Metalworking machinery

35414 — BRAZIL — Honing & polishing machines for interiors of hydraulic cylinder tubes (up to 8" in diameter, up to 60" in length). Offers desired from manufacturers who can provide technical assistance, recommend machines, tools best applicable for purpose. Correspondence requested in Portuguese, Spanish, Italian. Farex Industria e Comercio de Marquinas Ltda. (importer, mfr., retailer), Rua Americo Brasiliense 1538, Santo Amaro, ZP18, Caixa Postal 674, Sao Paulo, SP. WTD 1/71.

35414—ITALY—Grinding machines. Internazionale Macchine Utensili, S.a.s. (dist.), Via Zuretti 49, 20125 Milan. WTD 1/71.

35482 — THAILAND — Drills, electric-powered hand tools. Requests catalogs, c.i.f. Bangkok prices. Utility Electric Co., Ltd. (importer, dist., agent), 55/24-25 Phyathai Rd., P.O. Box 831, Bangkok. WTD 2/71.

35484 — SWITZERLAND — Novelty automotive maintenance, diagnostic equipment except electronic instruments; garage, service station equipment all kinds. Requests offers from manufacturers only. WICO-TECHNIK AG, Attn: A. Fumasoli (importer, dist., mfr.), Nueschelerstrasse 31, 8022 Zurich. WTD 3/71.

Special industry machinery

35510—ENGLAND—Ice cream machinery; food mixers; food slicers, choppers. Knightsbridge Engineering (Export) Ltd. (dist., mfr.), 39/41 Margravine Rd., London, W.6. WTD in prep.

35513 — ENGLAND — Bottle machinery such as bottle feeders, bottle cleavers, bottle labellers, bottle carton and packing machinery. Gravfil Machines Ltd. (mfr., exporter), Chapel Rd., London, S.E.24. WTD 3/71.

35595—FRANCE—Machinery for electronic industry. Particularly interested in representing advanced machinery used to produce electronic components. ELENIC (importer, dist., exporter), 6 rue Monsieur, 75-Paris 7. WTD in prep.

General industrial machinery

35612 — PANAMA — Water pumps. Camilo A. Porras, S.A. (importer, agent, retailer), Box 713, Panama 1. WTD 4/71.

35662 — GERMANY — Gears, assembled and unassembled, all types. Firm would prefer to represent U.S. firm who in turn would represent subject firm in U.S. Heinrich Reining GmbH (dist., mfr., exporter), 14 Hixholzer Weg, 562 Velbert, Postfach 926. WTD 2/71.

35690—THAILAND — Jacks, hydraulic: capacity 1-100 tons. Requests catalogs, c.i.f. Bangkok prices. Utility Electric Co., Ltd. (importer, dist., agent), 55/24-25 Phyathai Rd., P.O. Box 831, Bangkok. WTD 2/71.

Office, computing, accounting machines

35731—AUSTRIA—Computer peripheral equipment. Universal Elektronik Import GmbH (importer, dist./wholesale, exporter), Makartgasse 3/11, A-1010 Vienna. WTD 1/71.

35733 — SWITZERLAND — All kinds of EDP peripherals. Mactronics SA (agent), Via Sorengo, 6900 Lugano. WTD 4/71.

Service industry machines

35811—FRANCE—Automatic merchandising machines. Beverage dispensers. SOGEFROID (importer, dist., mfr.), 14, rue Guenot, 75-Paris 11e. WTD in prep.

35852—FRANCE—Room air conditioning units. SOGEFROID (importer dist., mfr.), 14, rue Guenot, 75-Paris 11e. WTD in prep.

35853—ENGLAND—Counters and counter display cases, refrigerated; cold drink dispensing equipment; ice making machinery. Knightsbridge Engineering (Export) Ltd. (dist., mfr.), 39/41 Margravine Rd., London, W.6. WTD in prep.

35857—FRANCE — Industrial refrigeration machinery, equipment for installation in small trucks. SOGEFROID (importer, dist., mfr.), 14, rue Guenot, 75-Paris 11e. WTD in prep.

35891—VENEZUELA—Commercial cooking equipment; electric, nonelectric. Re-

frigeracion La Modelo C.A. (importer, mfr., agent), Edificio La Modelo, calle 1, Urbanizacion La Entrada, La Yaguara and Apartado 20041, Caracas. WTD 3/71.

Electric transmission, distribution equipment

36110 — FRANCE — Function and pulse generators; miscellaneous testing, measuring and control instruments for the manufacture of electronic components; voltage and precision gauges and standards; precision measuring bridges suited to manufacturing of resistors and capacitors; numerical measuring instruments for measurement of resistances, capacitances, frequencies, self-inductance. ELENIC (importer, dist., exporter), 6 rue Monsieur, 75-Paris 7. WTD in prep.

36110—SWITZERLAND — All kinds of portable, panelboard, graphic recording measuring instruments. Mactronics SA (agent), Via Sorengo 6, 6900 Lugano. WTD 4/71.

36111—PANAMA—Electric meters. Camilo A. Porras, S.A. (importer, agent, retailer), Box 713, Panama 1. WTD 4/71.

36112 — AUSTRIA — Test equipment measuring instruments, production equipment for electronics industry, of the kinds licensed for export to Eastern Europe. Technotherm Export-Import GmbH (importer, dist., agent), Neustiftgasse 18, P.O. Box 229, A-1071 Vienna. WTD 10/70.

36132—PANAMA—Paper circuit breakers, safety switches. TECNO-Electrica Industrial, S.A. (importer, agent, retailer), P.O. Box 7137, Panama 5. WTD 4/71.

36132—THAILAND—Air circuit breakers. Requests catalogs, c.i.f. Bangkok prices. Utility Electric Co., Ltd. (importer, dist., agent), 55/24-25 Phyathai Rd., P.O. Box 831 Bangkok. WTD 2/71.

36133 — THAILAND — Safety switches. Requests catalogs, c.i.f. Bangkok prices. Utility Electric Co., Ltd. (importer, dist., agent), 55/24-25 Phyathai Rd., P.O. Box 831, Bangkok. WTD 2/71.

Electrical industrial apparatus

36220—AUSTRIA — Industrial controls. Universal Elektronik Import GmbH (importer, dist./wholesale, exporter), Makartgasse 3/11, A-1010 Vienna. WTD 1/71.

36220—SWITZERLAND — All kinds of control accessories, electronic controls, other industrial controls. Mactronics SA (agent), Via Sorengo 6, 6900 Lugano. WTD 4/71.

36231—SWITZERLAND—Electrical steel cutting machines for use on construction sites. ISMA AG, Attn: Mr. Heller (dist., agent), P.O. Box 479, 1001 Lausanne. WTD in prep.

36240 — IRAN — Electrodes, carbon and graphite for welding, batteries, plugs, plates, rods, power tubes. Stahl Commercial & Engineering, Ltd. (importer, dist., agent), 487 Sepah Ave., Tehran. WTD 1/71.

Household appliances

36312—IRAN—Gas ranges, surface cooking taps. Stahl, Commercial & Engineering, Lt. (importer, dist., agent), 487 Sepah Ave., Tehran. WTD 1/71.

36343—MEXICO—Coin operated electric massager of the kind placed underneath bed mattresses, seats of reclining lounge chairs, providing vibratory massage; used in hotels, motels, etc. Rymm, S.A. (importer, retailer), Diego de Montemayor Nte. 200, Monterrey, N.L. WTD in prep.

Electric lighting, wiring equipment

36410—PANAMA — Incandescent bulbs. TECNO Electrica Industrial S.A. (importer, agent, retailer), P.O. Box 7137, Panama 5. WTD 4/71.

36421—PANAMA — Residential electric lighting fixtures. Rodelag, S.A. (importer, agent, retailer), Box 4503, Panama 5. WTD 4/71.

36426 — PANAMA — Fluorescent tubes. TECNO Electrica Industrial S.A. (importer, agent, retailer), P.O. Box 7137, Panama 5. WTD 4/71.

36430—ITALY — Connectors for electronics. ELEDRA 3S (dist.), Via Ludovico da Viadana 9, Milan. WTD 12/70.

Communications equipment

36621—THAILAND—Mobile radio transceivers. Requests catalogs, c.i.f. Bangkok prices. Utility Electric Co., Ltd. (importer, dist., agent), 55/24-25 Phyathai Rd., P.O. Box 831, Bangkok. WTD 2/71.

36623 — AUSTRALIA — Security alarm equipment. Hodgson & Lee Pty. Ltd., Attn: Arthur Geoffrey Lee, Mng. Dir. (importer, dist., retailer), 1031 Bourke St., Waterloo, N.S.W. 2017. WTD in prep.

36626—FRANCE—Electronic measuring instruments, industrial, including measuring amplifiers. ELENIC (importer, dist., exporter), 6 rue Monsieur, 75-Paris 7. WTD in prep.

Electric components, accessories

36790 — FRANCE — Electronic components, materials for electronic industry. ELENIC (importer, dist., exporter), 6 rue Monsieur, 75-Paris 7. WTD in prep.

36790—ITALY — Electronic components. ELEDRA 3S (dist.), Via Ludovico da Viadana 9, Milan. WTD 12/70.

36795 — AUSTRIA — Electronic components such as integrated circuits thyristors. Universal Elektronik Import GmbH (imp., dist./wholesale, exp.), Makartgasse 3/11, A-1010 Vienna. WTD 1/71.

Motor vehicles, equipment

37141 — JAMAICA — Auto parts, accessories: starters, generators, alternators, etc. Quotations: c.i.f. Kingston. Winston L. Dandy Ltd., Attn: Winston Dandy (importer, retailer), 99 Harbour St., Rm. 4 Upstairs, Kingston. WTD 3/71.

Motorcycles, bicycles, parts

37510—PANAMA—Mini-bicycles. Rodelag, S.A. (importer, agent, retailer), Box 4503, Panama 5. WTD 4/71.

Transportation equipment

37992—FINLAND—Wheels for trotting race carts. Kilanto & Co., Leo Kr. Kilanto, Dir. (importer, dist., retailer), Lokkalantie 16, Helsinki 33. WTD 3/71.

Engineering, laboratory, scientific, research instruments

38110—GERMANY — Chemical physiological, medical measuring instruments. Prices requested c.i.f. Hamburg or Bremen. Dr. Berthold G. Schlag (importer, dist.), 19 Am Muehlenberg, 507 Bergisch-Gladbach. WTD 6/70.

38112—AUSTRIA—Electronic measuring instruments, control equipment for scientific purposes, testing and production equipment for electronic components. Universal Elektronik Import GmbH (imp., dist./wholesale, exp.), Makartgasse 3/11, A-1010 Vienna. WTD 1/71.

38112 — SWITZERLAND — All kinds of laboratory, research, scientific instruments. Mactronics SA (agent), Via Sorengo 6, 6900 Lugano. WTD 4/71.

38112—SWITZERLAND — High vacuum instruments, related items. W. Stolz AG, Attn: Mr. Herkommer (agent), 8968 Mutschellen. WTD 6/70.

38112—TAIWAN—Laboratory, scientific instruments. Chia Po Trading Co., Ltd. (importer, agent), 3rd Fl., 12 Po Ai Rd., Taipei 100. WTD in prep.

Instruments for measuring, controlling, indicating physical characteristics

38210 — SWITZERLAND — All kinds of industrial process, measuring, controlling instruments. Mactronics SA (agent), Via Sorengo 6, 6900 Lugano. WTD 4/71.

38212—PANAMA — Water meters. Camilo A. Porras, S.A. (importer, agent, retailer), Box 713, Panama 1. WTD 4/71.

Surgical, medical instruments

38410—TAIWAN—Surgical, medical instruments. Chia Po Trading Co., Ltd. (importer, agent), 3rd Fl., 12 Po Ai Rd., Taipei 100. WTD in prep.

38423—FRANCE—Clothing, protective: except shoes. Societe Royal Villette (importer, dist., mfr.), 108, ave. Fromenteau, 91-Savigny sur Orge. WTD in prep.

Photographic equipment, supplies

38615—PANAMA—Graphic arts equipment. Camilo A. Porras, S.A. (importer, agent, retailer), Box 713, Panama 1. WTD 4/71.

Toys, amusement, sporting goods

39410—SWITZERLAND—All kinds of do-it-yourself games, hobby articles, genuine novelties only. Ernst Mettler (importer, dist.), Dornacherstrasse 375, 4053 Basel. WTD 3/71.

39491—PANAMA—Fishing tackle. Abernathy, S.A. (importer, agent, retailer), Box 3501, Panama 1. WTD 4/71.

Pens, office, artists' materials

39510—SWITZERLAND — Pens, pencils, penpoints, soft tip pens, mechanical pencils, genuine novelties for office use. Ferd. Spaeti (dist., retailer), Hirschenplatz 10, 6000 Lucerne. WTD 8/70.

39530 — SWITZERLAND — Markers, marking devices, stencils for office use. Ferd. Spaeti (dist., retailer), Hirschenplatz 10, 6000 Lucerne. WTD 8/70.

39550—SWITZERLAND—Carbon paper, inked ribbons. Ferd. Spaeti (dist., retailer), Hirschenplatz 10, 6000 Lucerne. WTD 8/70.

Manufacturing industries

39962—HONG KONG—Vinyl wallcoverings. Lintex Wallpaper Co. (importer, dist., agent), 446 Nathan Rd., 2/F, Kowloon, Hong Kong. Cable: LINTEXWALL Hong Kong. WTD in prep.

39990—SWITZERLAND—All kinds of genuine novelties, do-it-yourself articles, giftware; premiums for sale in hardware, stationery stores, fast-moving consumer goods. Ernst Mettler (importer, dist.), Dornacherstrasse 375, 4053 Basel. WTD 3/71.

Direct Sales

Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.

Tanks, components

19310 — SWITZERLAND — Special replacement parts for M-47, M-48 tanks. Direct purchase & agency. Candia S.a.r.l., Attn: Nicolas E. Zygomalas (dist., agent), 22 Ave. d'Echellens, 1004 Lausanne. WTD in prep.

Meat products

20110—PORTUGAL—Edible tallow, pork fat to be used in manufacture of margarine: 22,000 lbs. of each per mo. Fabrica de Margarina Cordeiro, Lda. (mfr.), Avenida Gomes Junior, 110, Madalena, V. N. Gaia. WTD in prep.

20114—PHILIPPINES—Pork; fresh, frozen. Fericsons, Inc. (imp., dist., mfr.) 2172 Leveriza St., Pasay City. WTD in prep.

20118—PHILIPPINES—Pork and pork products, canned. Fericsons Inc. (importer, dist., mfr.), 2173 Leveriza St., Pasay City. WTD in prep.

20118 — TAIWAN — Canned beef veal. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

Dairy products

20210 — SINGAPORE — Butteroil, 99.9% butterfat. Thio Keng Poon, Mng. Dir., Malaysia Dairy Industries (Pte.) Ltd. (dist., mfr.), 2 Davidson Rd., Singapore 13. WTD 3/71.

20210 — TAIWAN — Creamery butter. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

20222—TAIWAN—Process cheese. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

20231 — SINGAPORE — Skimmed milk powder, spray processed. Thio Keng Poon, Mng. Dir., Malaysia Dairy Industries (Pte.) Ltd. (dist., mfr.), 2 Davidson Rd., Singapore 13. WTD 3/71.

20231 — TAIWAN — Milk powder. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

20232—TAIWAN — Canned milk. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

Canning, preserving foods

20310—TAIWAN — Canned turtle soup, clam chowder, fish chowder, mockturtle soup. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

20321 — TAIWAN — Canned baby food. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao Rd., Sec. 4, Taipei 106. WTD in prep.

20322—TAIWAN—Canned chicken, turkey, duck, other poultry soups, broths. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

20331—TAIWAN — Canned figs, litchis, cherries, raspberries, currants. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

20332—TAIWAN—Canned gherkin, potatoes, tomatoes, spinach, onions, beans, peas, carrots, cucumber (including pickle), radish, tomato paste and tomato puree, cabbage, cauliflower, sauerkraut. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

Bakery products

20521 — TAIWAN — Biscuits. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

Confectionery

20728 — TAIWAN — Powdered cocoa. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

Beverage industries

20874—HONDURAS—Peach, pear, apple, apricot, grape fruit concentrates. Quimicas Dinant de Centroamerica, S.A. de C.V. (importer, mfr.), Carretera a Suyapa, Tegucigalpa, D.C. WTD in prep.

20874 — ZAMBIA — Squash, cordial concentrates. Also interested in licensing agreement. Les McLean Ltd. (importer, dist., mfr.), P.O. Box 492, Ndola. WTD in prep.

Food preparations

20951—TAIWAN—Roasted coffee. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao East Rd., Sec. 4, Taipei 106. WTD in prep.

20990 — ITALY — Food specialties, particularly American national products, but excluding frozen foods. Castroni Marcello (retailer), Via Cola di Rienzo 196, 00192 Rome. WTD 3/71.

20998—TAIWAN—Chocolate for baking, cooking, etc., unsweetened or sweetened: except confectionery-type chocolate. Acme Co., Ltd. (importer, dist., retailer), Champagne Bldg., 71 Chung Hsiao Rd., Sec. 4, Taipei 106. WTD in prep.

Broad woven fabric mills, manmade fiber, silk

22214 — NETHERLANDS — Polyester blended cotton gray cloth voile, 60 x 56 threads per in., width 47 in. Direct purchase and/or agency. MAKOTEX, Attn: M. A. Koppenaal, Mgr. (importer, dist., exporter), 7 Nachtegaallaan, Sassenheim. WTD 3/71.

22216 — NETHERLANDS — Corduroy, also seconds. Direct purchase and/or agency. MAKOTEX, Attn: M. A. Koppenaal, Mgr. (importer, dist., exporter), 7 Nachtegaallaan, Sassenheim. WTD 3/71.

Textile goods

22952—GERMANY—Vinyl coated fabrics for manufacture of vertical slats for textile sunshades, blinds. Correspondence requested in German. Mechanische Fensterbehaenge GmbH (mfr.), 255 Hafenstrasse, P.O. Box 3099, 285 Bremerhaven 21. WTD 2/70.

Sawmills, planing mills

24211—ITALY—Douglas fir sawed lumber. Berardi Nicola di Nicola E Carlo Berardi (importer, dist., retailer), Via Pantaleone Rapino, 66026 Ortona (Chieti). WTD 3/71.

Furniture, fixtures

25911—GERMANY—Window shades and accessories made of metal and plastic; curtain rods, metal and plastic. C.i.f. European ports. Direct purchase & agency. Semer KG (importer, dist.), 106 Eberhard-Hoesch-Str., 516 Dueren. WTD 7/70.

Pulp mills, products

26112—GERMANY—Wood pulp, conifers only, for papermakers and/or use by chemical industries, bleached and unbleached, in lots of 500 to 1,000 tons. Quotations c.i.f. North Atlantic port preferred. Direct purchase & agency. Wilfried Zietek (importer, agent), 39 Herdentorsteinweg, 28 Bremen. WTD in prep.

Paper mills, products

26211—GERMANY — Newsprint paper. Correspondence requested in German. Hans Mohrhagen K.G. (importer, dist.), 7 Stuttgart 1, Rotebuehlstr.63. WTD 3/70.

Converted paper, paperboard products

26470—AUSTRIA — Disposable hospital gowns, laboratory coats. Reazent Allgemeine Handelsgesellschaft mbH (importer, dist., agent), Martinstrasse 5, A-1180 Vienna. WTD 9/70.

Books

27313 — NETHERLANDS — Scientific books, college texts for university bookstore. Trade catalogs requested. Free University Bookshop, V.U. Boekhandel, Attn: L. H. Oey (importer, dist., retailer), 1115 De Boelelaan, P.O. Box 7161, Amsterdam. WTD 1/70.

Industrial chemicals

28190—JAMAICA—Intermediate, component chemicals for water treatment products. Technical support, literature welcomed. Quotations: f.o.b. Miami. WASEMCO Ltd., Gen. Mgr. (dist., mfr.), Box 276, Kingston 5. WTD in prep.

28199 — MEXICO — Purchase of nickel sulphate, 150 kgs. per mo. for nickel coating of sundry parts, such as buttons for clothing, snaps, etc. Heby Bot, S.A. (importer, dist., mfr.), Ave. Nogalar Norte Cruz con Via Matamoros, San Nicolas de los Garza, N.L., Apartado Postal 1848, Monterrey, N.L. WTD in prep.

Synthetic materials

28210—ENGLAND — Laminated plastic sheet for use in "Secret until Lit" indicator fittings, consisting of black opaque surface, one side 0.010" (0.25mm.) thick, backed by translucent white or opal to make total thickness of 0.040" (1 mm.) and 0.062" (1.5 mm.). Material to be rigid, flat and withstand temperature of 100° cent. continuously. A. F. Bulgin &

Co. Ltd. (mfr.), Bye Pass Rd., Barking, Essex. Attn: Miss K. M. Odam. WTD in prep.

28210 — SWITZERLAND — Three hundred metric tons per mo. of polyethylene scrap on long-term basis. Mr. Radi, Eliplast AG, 3186 Duedingen.

Soap, detergents, cleaning preparations, perfumes, cosmetics

28410—ZAMBIA—Concentrates of detergents, shampoos, soft soap. Also interested in licensing agreement. Les McLean Ltd. (importer, dist., mfr.), P.O. Box 492, Ndola. WTD in prep.

28420—AUSTRIA—New household chemicals including aerosols. Direct purchase & agency. Peter A. Holub (importer, dist./wholesale, agent), Wiedner Hauptstrasse 23-25, A-1040, Vienna. WTD in prep.

28445—NETHERLANDS—High quality cosmetics. Exclusive dist. CIVA N.V., Attn: H. Mol (importer, dist.), 22 Linnaeusparkweg, Amsterdam. WTD 3/71.

Gum, wood chemicals

28611—MEXICO — Redistilled (refined) pine oil, (75 drums with approximate weight of 200 kgs. each) for manufacture of household disinfectants. Maria del Carmen Martinez Romero (Desinfectantes Monterrey) (importer, dist., mfr.), Escobedo Sur 308, Monterrey, N.L. WTD in prep.

Chemical products

28990—ZAMBIA—Vinegar concentrates; malt, glacial acetic acid. Also interested in licensing agreement. Les McLean Ltd. (importer, dist., mfr.), P.O. Box 492, Ndola. WTD in prep.

Paving, roofing materials

29523—NETHERLANDS — Roofing felt, on rolls. Direct purchase, agency or dist. for Europe. Handelsonderneming J. Snoei N.V., Attn: H. G. van Hoogdalem, Mgr. (importer, dist., exporter), 446 Kralingseweg, or P.O. Box 4146, Rotterdam-17. WTD 2/71.

Plastic products

30790—AUSTRIA—Home decorating materials, products of plastics, other materials. Direct purchase & agency. Peter A. Holub (importer, dist., agent), Wiedner Hauptstrasse 23-25, A-1040 Vienna. WTD in prep.

30795—FRANCE—Twenty-two large size lucite rings. Specifications, description available from Business Opportunities Staff, Dept. of Commerce, BDC-541, Rm. 3515, Washington, D.C. 20230. Thomson CSF (mfr.), Domaine de Corbeville, 91-Orsay. WTD in prep.

30796 — NETHERLANDS — Polyester, PVC corrugated sheeting. Direct purchase, agency or dist. for Europe. Handelsonderneming J. Snoei N.V., Attn: H. G. van Hoogdalem, Mgr. (importer, dist., exporter), 446 Kralingseweg, or P.O. Box 4146, Rotterdam-17. WTD 2/71.

30797—GERMANY—Household, kitchen utensils of plastic. Hausrat-Import GmbH (importer, agent), 10 Ohmstrasse, D-7100 Heilbronn. WTD 9/70.

Glass products

32316—CYPRUS—Glassware, etched, ornamented, bent etc. Quote c.i.f. Cyprus. Direct purchase & agency. Savvas Ch. Kafassakis & Son (importer, dist., retailer), 76-78 Hermes St., Nicosia. WTD 1/71.

Pottery, related products

32620—CYPRUS—Vitreous china, porcelain table, kitchen articles. Quote c.i.f. Cyprus. Direct purchase & agency. Savvas Ch. Kafassakis & Son (importer, dist., retailer), 76-78 Hermes St., Nicosia. WTD 3/71.

32690 — BELGIUM — Ceramics, artistic. Direct purchase & agency. Etablissements Dany (importer, dist., agent), 8 Rue de Genly, 7250 Eugies. WTD 9/70.

32690—CYPRUS—Art, decorative, novelty pottery ware. Quote c.i.f. Cyprus. Direct purchase & agency. Savvas Ch. Kafassakis & Son (importer, dist., retailer), 76-78 Hermes St., Nicosia. WTD 3/71.

Abrasive, asbestos, nonmetallic mineral products

32927—NETHERLANDS — Asbestos cement corrugated sheeting. Direct purchase, agency or dist. for Europe. Handelsonderneming J. Snoei N.V., Attn: H. G. van Hoogdalem, Mgr. (importer, dist., exporter), 446 Kralingseweg, or P.O. Box 4146, Rotterdam-17. WTD 2/71.

32990—PHILIPPINES — Pre-mixed raw material for manufacture of high-tension porcelain insulators. Initial requirement: 50 tons per mo. Republic Ceramics Manufacturing Corp. (mfr.), c/o Bing T. Huang, Suite G, 5th Fl., Davies Far East Bldg., Buendia Ave., Makati, Rizal. WTD in prep.

Steel mill products

● **33100 — CEYLON** — 250,000 ft. butt-welded, 140,000 ft. lapwelded, galvanized iron water pipe threaded and coupled to British standard specification 1387 (medium quality) of 1957 or equivalent. Bid deadline May 18. Government Supplies Dept., Colombo. Copies of tender documents available from Embassy of Ceylon, 2148 Wyoming Ave., NW., Washington, D.C. 20008.

● **33100—IRAN**—45,000 KGS seamless steel pipe S.T. 50-2 to DIN-1013 sizes 80 x 55 mm., 65 x 45 mm. and 75 x 50 mm. Bid deadline May 24; Tender No. 1745/49 (renewed). Iranian State Railways. Copies of tender documents available from Iranian Economic Mission, 2233 Wisconsin Ave., NW., Washington, D.C. Reference 7316.

● **33500—IRAN**—Supply of low and high tension copper cables, junctions, terminals. Bid deadline May 12. Contact Iranian Steel Corp., Ave. Pahlaui, Tehran.

● **33100—SUDAN**—174 metric tons 35 lb. rails, 1,125 pairs of fishplates, 4,500 pieces fishbolt and nuts, 10 sets of points and crossings. Bid deadline May 12; Tender SGB/SUP/28.B.30T/395. Sudan Gazira Board, Barakat. Copies of tender documents available from Iron & Steel Industry Operations, BDC, Dept. of Commerce, Washington, D.C. 20230 (202-967-2613).

● **33100—THAILAND**—Hot rolled round steel bar, 10 meters long, 18,000 6 mm. dia., 12,000 9 mm. dia., 5,000 12 mm. dia., and 20,000 15 mm. dia., minimum tensile 41 kgs/mm². Bid deadline May 17; Invitation MEA-PSD-233. Metropolitan Electricity Authority, Bangkok. Copies available from Iron & Steel Industry Operations, BDC, Dept. of Commerce, Washington, D.C. 20230 (202-967-2613).

33124 — VIET-NAM — Steel plates for barge, tugboat construction. Thanh Xuong (importer, mfr.), 29 Yen Do, Saigon. WTD in prep.

33167 — NETHERLANDS — Galvanized iron corrugated sheeting, normal and prepainted, straight curved; pierced steel planking, new and used. Direct purchase, agency or dist. for Europe. Handelsonderneming J. Snoei N.V., Attn: H. G. van Hoogdalem, Mgr. (importer, dist., exporter), 446 Kralingseweg, or P.O. Box 4146, Rotterdam-17. WTD 2/71.

Secondary smelting, refining of nonferrous metals

33412—KOREA — Secondary copper ingot, copper-base alloys; BCl Cu 79-83%; Sn 2-4%; Zn 8-12%; Pb 3-7%; less than 1.5% impurity; BC-3 Cu 86-89.5%; Sn 9-11%; Zn 1-3%; Pb-O; less than 1% impurity; BC-6 Cu 83-87%; Sn 4-6%; Zn 4-6%; Pb 3-6%; less than 1.5% impurity. Requests quotations, specifications soon as possible. Korea Pollution Preventive Corp. (importer, agent, engineering firm), K.P.O. Box 207, Seoul. WTD 12/70.

Nonferrous foundries

33610—GERMANY — Aluminum household, kitchen equipment, utensils. Hausrat-Import GmbH (importer, agent), 10 Ohmstrasse, D-7100 Heilbronn. WTD 9/71.

Heating apparatus, plumbing fixtures

34320 — PERU — Nozzles for home type water fountains. Neves S.A., J. & W. (importer, dist.), La Ribera 675, Chucuito, Callo, P.O. Box 1466, Lima. WTD in prep.

Fabricated structural metal products

34411—NETHERLANDS — Romney and nissen ribs for construction of metal buildings, new and used. Direct purchase, agency or dist. for Europe. Handelsonderneming J. Snoei N.V., Attn: H. G. van Hoogdalem, Mgr. (importer, dist., exporter), 446 Kralingseweg, or P.O. Box 4146, Rotterdam-17. WTD 2/71.

Metal stampings

34610 — CYPRUS — Stamped and spun commercial, hospital utensils; cooking and kitchen household utensils. Quote c.i.f. Cyprus. Direct purchase & agency. Savvas Ch. Kafassakis & Son (importer, dist., retailer), 76-78 Hermes St., Nicosia. WTD 3/71.

Fabricated metal products

34943—GERMANY—Ball stop cocks for pressures up to 25 atmospheres, Teflon-covered, or equal, and resistant to corrosion, acid, hot water, and oil. Price quotations c.i.f. European ports. Kreuzstromwerk GmbH (importer, dist.), 58 Hagen/Westf., Sedanstrasse 1-3. WTD 3/70.

34990—FRANCE — Spray nozzles, aerosols. INTRAMA (dist., mfr.), 12, Passage Courat, 75-Paris 20e. WTD in prep.

Engines, turbines

35190 — SWITZERLAND — Replacement

parts, accessories for heavy diesel engines for marine applications; diesel engines for military trucks, similar uses, especially M-47, M-48 tanks. Direct purchase & agency. Candia S.a.r.l., Attn: Nicolas E. Zygomalas (dist., agent), 22, Ave. d'Echellens, 1004 Lausanne. WTD in prep.

35193—ITALY—Diesel engines, industrial, up to 600 hp. I.R.P.E.M. (Ingg. Ricci Pellegrini Elettro Meccanica) S.r.l. (importer, mfr., agent), Via Appia Nuova 1043, 00178 Rome. WTD 6/70.

35193 — VIET-NAM — Marine engines, diesel, from 300 to 1,000 hp. having 2 engine-speeds: 1 category with 1,500 to 1,800 rpm., other with 900 to 1,200 rpm. Thanh Xuong (importer, mfr.), 29 Yen Do, Saigon. WTD in prep.

Farm machinery

35220 — ITALY — Lawn mowers, hedge trimmers, other special agricultural equipment, tools. Comas di Mario Azzalini (importer), Via Vittorio Veneto 147, Belluno. WTD 1/71.

35225 — VENEZUELA — Small rebuilt agricultural implements. Correspondence requested in Spanish. Auto-Repuestos Y Maquinarias Greda C.A., Attn: Assaad H. Dagher (retailer), Apartado Postal 3913, Caracas 101. WTD in prep.

Construction, mining, materials handling machinery, equipment

35314—VIET-NAM — Electric forklifts, 4,000 lbs. capacity; truck cranes 25,000 lbs. capacity and above. Thanh Xuong (importer, mfr.), 29 Yen Do, Saigon. WTD in prep.

35320 — PHILIPPINES — Copper, gold and silver concentrating plant, complete, used or brand-new; capacity: 1,000 tons of ore a day. Used plant must be in running condition. Asbestos processing plant, complete, used; capacity: 2,000 to 5,000 tons of asbestos ore a day, must be in running condition. La Suerte Resources & Industries, Inc. (mining), Suite G, 5th Fl., Davies Far East Bldg., Buendia Ave., Makati, Rizal. WTD in prep.

35370—PORTUGAL — Industrial trucks, tractors. Direct purchase & agency. Sociedade de Representacoes Coutinhos, Lda. (importer, dist., agent), 596 Rua de Sa da Bandeira, Apartado No. 302, Oporto. WTD 3/71.

Metalworking machinery

● 35400—KOREA — Metalworking machinery including: watch making machinery. Tender No. MIB-ADB-76, bid deadline Apr. 30. Gap type lathe, two upright drilling tapping machines; two bench drilling and tapping machines; one precision tool grinder; one universal indexer; four tapping machines and one fork lift truck with a load capacity of 1,000 kg; Tender No. MIB-ADB-75; bid deadline Apr. 30. Technical Services Dept., Medium Industry Bank 36, 2-ka, Ulchi-ro, Chung-ku, Seoul. Copies of tender documents available from Metalworking Operations, Dept. of Commerce, BDC-649, Washington, D.C. 20230. (202-967-5652).

35410—BRAZIL — Modern metal-cutting type machine tools. Direct purchase and agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

Special Action

Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.

28930—AUSTRIA—Printing inks, other chemicals for printing industry. Correspondence requested in German. Franz Aigner, Inhaber Ing. H. Nagelholz (mfr., agent), Oedenburgerstrasse 12, A-1210, Vienna. WTD 3/71.

29920—NETHERLANDS — Lubricants, hydraulic fluids, cutting oils, rust preventatives, greases, special, coatings for industrial automative use. Exclusive rep. in Netherlands, Benelux or Europe. ENKES, N.V., Attn: L. H. J. de Bruyn, Gen. Mgr. (importer, mfr.), 60 Westvlietweg, P.O. Box 3004, Voorburg. WTD in prep.

34521 — NETHERLANDS — Advanced metal and nylon fasteners for industrial and automotive use. Exclusive rep. for Netherlands, Benelux or Europe. License considered. ENKES, N.V., Attn: L. H. J. Bruyn, Gen. Mgr. (importer, manufacturer), 69 Westvlietweg, P.O. Box 3004, Voorburg. WTD in prep.

35730—ISRAEL — EDP peripheral equipment for computer components: self-contained units for tape; disc drives; printers/card readers; terminals. Purchase to be on original electronics manufacturers' basis. Cable: INPEREQ TEL-AVIV. I.P.E.-International Peripheral Equipment Ltd. (importer, mfr., exporter), 32 Ben Yehuda St., P.O. Box 26068, Tel Aviv. WTD in prep.

36393 — NETHERLANDS — Domestic garbage disposers. Exclusive rep. in Netherlands, Benelux or Europe. Will consider license. ENKES N.V., Attn: L. H. J. de Bruyn, Gen. Mgr. (importer, mfr.), 60 Westvlietweg, P.O. Box 3004, Voorburg. WTD in prep.

37141 — NETHERLANDS — Automotive replacement parts such as brake linings, axles, camshafts, exhaust-fume purifiers, gears, lubrication systems, spray guns, diesel engine and motor replacement parts, bearings, valves. Exclusive rep. in Netherlands, Benelux or Europe. License considered. ENKES N.V., Attn: L. H. J. de Bruyn, Gen. Mgr. (importer, mfr.), 60 Westvlietweg, P.O. Box 3004, Voorburg. WTD in prep.

35419 — VENEZUELA — Rebuilt machine tools. Correspondence requested in Spanish. Auto-Repuestos y Maquinarias Greda C.A., Attn: Assaad H. Dagher (retailer), Apartado Postal 3913, Caracas 101. WTD in prep.

35420—BRAZIL—Modern metal-forming type machine tools. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

35442—JAMAICA—Second hand plastic extruder, specifications: 2½ in.; variable speed; up to 30 hp.; quotation: c.i.f. Kingston. Final price subject to negotiation. Plastic Extrusion Ltd., Attn: H. L. Nembhard (importer, mfr.), 54 Molynes Rd., Kingston 10. WTD 4/71.

35442 — NEW ZEALAND — Industrial molds for plastic production of commercial fishing items such as floats, net needles. Seeks source for hiring or leasing molds. Marine Floats Ltd. Attn: G. C. O'Hara, Dir. (mfr.), 54 Huia Rd., Otahuhu, Auckland 6. P.O. Box 22-194, Otahuhu, Auckland 6. WTD 3/71.

35451—BRAZIL—Precision cutting tools, machinist's types. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

35480—ITALY—Chain saws, other forestry tools. Comas di Mario Azzalini (importer), Via Vittorio Veneto 147, Belluno. WTD 1/71.

35481—MEXICO—Machinery for applying metallic hard-facing for agricultural implements, particularly cultivator sweeps. Pieces to be treated are SAE-1050 and SAE-1080 steel and will be heat-treated after application of hard-facing. Correspondence requested in Spanish. Implementos Agricolas Monterrey, S.A., Attn: Juan M. Garcia, Gerente Administrativo (dist., mfr.), Villagran Nte. 2802, Monterrey, N.L. WTD in prep.

35484—NETHERLANDS—Garage equipment, automotive tools, machinery. Exclusive rep. for Benelux countries or Netherlands. Rosier-Rosam N.V. (importer, agent, dist.), 20 Textielweg, Amersfoort. WTD 3/71.

35484 — SWITZERLAND — Service station equipment; automotive maintenance, diagnostic equipment: genuine novelties only. STREAG Auto-Handels AG, Attn: Paul Ruch, Dir. (importer, distributor), Badenerstrasse 610, 8048 Zurich. WTD 3/71.

35485—MEXICO—Wire coat hanger making machinery with minimum production capacity of 10,000 pieces per 8 hr. shift. Sr. Alfonso Sada De la Fuente Tintoreria Panamericana, S.A. (retailer, dist.), Simon Bolivar Nte. 1721, Monterrey, N.L. WTD in prep.

Special industry machinery

● 35500 — KOREA — Textile processing machinery opening through weaving. Bid No. KDFC-IBRD-71-42; bid deadline May 1, 1971. Chonbang Company, Ltd., Changkyodong, 42, Chung-Ku, Seoul. Copies of conditions and specifications may be obtained from the Dept. of Commerce, General Industries Div., Washington, D.C. 20230 ★(202-967-5589).

35511 — PORTUGAL — One centrifugal machine for dry milk agglomeration; one pasteurizer 600 liter (160 gal./hr. capacity; 40 to 45% dry product at 30° to 140° C. temperature). Requests catalogs, prices. Nunes, Rodrigues & Ca., Lda. (A Lacticinia de Avanca) (mfr.), Avanca. WTD in prep.

35512—MEXICO—Corn chip manufacturing machinery; production system including corn cooking, corn washing, corn

milling, corn deep fat frying. Sr. Antonio C. Moreno Productos Tico (dist., mfr.), Reforma Pte. 1522, Monterrey, N.L. WTD in prep.

35512—PHILIPPINES—Ginger Processing machinery. Manuel Clemente (potential manufacturer, exporter of ginger), 28 Fil-Am Rd., Bo. Capitolyo, Pasig, Rizal. WTD in prep.

35513—MEXICO—Fruit (grapes, strawberries) processing machinery for manufacture of jelly, and/or jam with production capacity of 60 to 100 metric tons per year. Joseph Martinez, Fermentaciones y Sintesis, S.A. (mfr.), Apartado Postal 142, Monterrey, N.L. WTD 10/70.

35513 — ZAMBIA — Liquid filling machines, liquid mixing machines, labeling machines. Requests offers. Les McLean Ltd. (importer, dist., mfr.), P.O. Box 492, Ndola. WTD in prep.

35521 — MEXICO — Complete circular production line for weaving polyster double-knit cloth, including technical and engineering/design services for installation in new plant. Principals wish initial line to be tailored to machinery investment around $100,000, but wishes flexibility for short-term doubling or tripling of capacity. Jack Mezrahi-Nassim Mezrahi e Hijos (mfr.), Sophocles 150, Col. Polanco, Mexico, D.F. WTD in prep.

35531—MEXICO—Lathe for manufacture of wooden broom handles. Jose Solares Lecano del Norte, S.A. (mfr.), Gonzalitos Sur 298, Monterrey, N.L. WTD in prep.

35532 — VENEZUELA — Rebuilt woodworking machine. Correspondence requested in Spanish. Auto-Repuestos y Maquinarias Greda C.A., Attn: Assaad H. Dagher (retailer), Apartado Postal 3913, Caracas 101. WTD in prep.

35593—BRAZIL—Plastics-working machinery. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

35593 — ZAMBIA — Machines to produce plastic bottles from 4 fl. oz. to 160 fl. oz. Requests offers. Les McLean Ltd. (importer, dist., mfr.), P.O. Box 492, Ndola. WTD in prep.

35594—BRAZIL — Rubber-working machinery. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (importer, dist., agent), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

35595 — MEXICO — Broom making machinery using broom corn as raw material. Jose Solares Lecano del Norte, S.A. (mfr.), Gonzalitos Sur 298, Monterrey, N.L. WTD in prep.

35595—MEXICO—Complete set of silver or chrome plating equipment for plating of plate glass mirrors. Francisco Rosales Fernandez Casa Rosales, S.A. (importer, mfr.), Pino Suarez Sur 117, Apdo. Postal 120, Monterrey, N.L. WTD in prep.

35595—PHILIPPINES—Electronic tube-making machinery, equipment, parts. Radiowealth Inc. (mfr.), Attn: Petronilo Guevara, 45, Libertad St., Mandaluyong, Rizal. WTD 1/71.

35595—PHILIPPINES — Equipment for manufacture of high-tension porcelain insulators, such as vacuum mixers and slip-pipe systems. Technical assistance requested. Republic Ceramics Manufacturing Corp. (mfr.), c/o Bing T. Huang, Suite G, 5th Fl., Davies Far East Bldg., Buendia Ave., Makati, Rizal. WTD in prep.

35595 — VENEZUELA — Machinery for manufacture of circular wire brushes for general industrial use. Correspondence requested in Spanish. Cepillos Industriales, C.A (dist., mfr.), Segunda Avenida Santa Eduvigis, P.O. Box 2267, Caracas. WTD 12/70.

35595—VENEZUELA—Rebuilt shoemaking, repairing machinery. Correspondence requested in Spanish. Auto-Repuestos y Maquinarias Greda C.A., Attn: Mr. Assaad H. Dagher (retailer), Apartado Postal 3913, Caracas 101. WTD in prep.

General industrial machinery

35612 — BRAZIL — Hydraulic power pumps up to 10,000 psi pressure, and motors: electric, gasoline. Correspondence requested in Portuguese, Spanish, Italian. Farex Industria e Comercio de Maquinas Ltda. (importer, mfr., retailer), Rua Americo Brasiliense 1538, Santo Amaro, ZP 18, Caixa Postal 674, Sao Paulo, SP. WTD 1/71.

35613—PERU—Small fractional horsepower water pumps for use in decorative water fountains sold to home owners. Pumps should be of 220 volts, if possible, otherwise of 110 volts. Pumps should be of less than one horsepower. Neves S.A., J. & W. (importer, dist.), La Ribera 675, Chucuito, Callao; P.O. Box 1466, Lima. WTD in prep.

35616 — AUSTRIA — Newly developed equipment for water preparation and utilization; advanced accessories for aluminum, concrete, plastic swimming pools. Tari Gesellschaft mbH (importer, mfr, wholesaler), Peter Rosegger-Weg 12, P.O. Box 116, A-5280 Braunau/Inn. WTD 3/71.

35642 — PORTUGAL — Air purification equipment. Direct purchase and agency. Sociedade de Representacoes Coutinhos, Lda. (importer, dist., agent), Rua de Sa da Bandeira, 596, Oporto, Apartado No. 302. WTD 3/71.

35672 — PAKISTAN — Electric arc furnaces for annual production of 24,000 tons of mild steel. Requests catalogs, quotations, c & f, Karachi. Usmania Commercial Agency (agent), 1 Pak Chamber, 25 W. Wharf Rd., Karachi. WTD in prep.

35690 — AUSTRIA — Control equipment for swimming pool filter plants with recycling capacity of 5, 7, 10, 15, 20, 30, 45, 60 and more cubic meters per hr.; automatic controls for water recycling plants of swimming pools. Tari Gesellschaft mbH (importer, mfr., wholesaler), Peter Rosegger-Weg 12, P.O. Box 116, A-5280 Braunau/Inn. WTD 3/71.

35690—PORTUGAL—Fire fighting equipment, except automotive; fire hose. Direct purchase and agency. Sociedade de Representacoes Coutinhos, Lda. (importer, dist., agent), Rua de Sa da Bandeira, 596, Apartado No. 302, Oporto. WTD 3/71.

Service industry machines

35853—GERMANY—Refrigerators, medicinal purposes. Special refrigerators for conserving blood plasmas at temperatures 20° to 25° F. Blood bank refrigerators with temperature range 40° to 44° F. Prices requested c.i.f. European ports. Direct purchase and agency. Boreas Tiefkuehl & Gefrierschraenke GmbH (agent), 115 Rheinallee, 4 Duesseldorf-Oberkassel. WTD 9/70.

35891—HONG KONG—Commercial kitchen equipment for hotels, restaurants. The Fortitude Engineers, Co. (dist.), Rm. A, Majestic House, 6th Fl., 80 Nathan Rd., P.O. Box K-2202, Kowloon. Cable: FORENGINER, Hong Kong. WTD in prep.

35892 — AUSTRIA — High performance midget water softening equipment for household, commerce, industry. Tari Gesellschaft mbH (importer, mfr.,- wholesaler), Peter Rosegger-Weg 12, P.O. Box 116, A-5280 Braunau/Inn. WTD 3/71.

35892 — NETHERLANDS — Commercial garbage disposers. Exclusive rep. in Netherlands, Benelux or Europe. License considered. ENKES N.V., Attn: L. H. J. de Bruyn, Gen. Mgr. (importer, mfr.), 60 Westvlietweg, P.O. Box 3004, Voorburg. WTD in prep.

35892—PORTUGAL—Water purification equipment. Direct purchase and agency. Sociedade de Representacoes Coutinhos, Lda. (importer, dist., agent), Rua de Sa da Bandeira, 596, Apartado No. 302, Oporto. WTD 3/71.

35892—SOUTH AFRICA—Automatic bus washing equipment for 300 buses per day of approx. dimensions: length 36ft., height 11ft., width 8ft. The City Council of Pietermaritzburg, Attn: D. D. Schumann, Trans. Mgr., P.O. Box 399, Pietermaritzburg, Natal.

Electric transmission, distribution equipment

● **36100 — ARGENTINA** — Supply two 132 KV transformers: Tender No. 3136; bid deadline May 5. Supply eight 132 KV, 800A circuit breakers; six 132 KV 2,000 "A" circuit breakers: Tender No. 3140; bid deadline May 5. Specifications available for approx. $13 for each tender from SEGBA, Balcarce 184, Oficina Compras Exterior, Buenos Aires.

● **36100—BURMA** — Supply unspecified number of 500 kw., diesel generator sets. Tender No. 48(T)/MCY-ESB(E)/7071: bid deadline May 28. Controller of Stores, Electricity Supply Board, Rose Bank Rd., Ahlone, Rangoon. Specifications available from American Embassy, Rangoon, for approx. $850 including air-mail charge.

● **36100—PARAGUAY**—Supply of 3,500 electric power meters. Tender No. ANDE 31/71; bid deadline Apr. 27. Invited by National Electric Power Admin. (ANDE). Estimated total cost $40,000. Specifications may be purchased for $5 from Gerencia General, ANDE, Calle Padre Cardozo 560, Asuncion.

36113 — BRAZIL — Electrical measuring instruments; dimensional, all usual industrial types, made only in U.S. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

36113—SINGAPORE—Electrical measuring instruments, multimeter AC/DC. E. F. Harwood, Gen. Mgr., Assoc. Instrument Manufacturers (Singapore) Pte. Ltd. (importer, dist., agent), 36 Kallang Place, Kallang Basin Industrial Estate, P.O. Box 63, Killiney Rd. Post Office, Singapore 12. WTD 3/71.

Electrical industrial apparatus

36212—SWITZERLAND—Electrical motors for floor sanding machines, 1½-2 hp., 50 cycles, 220 volts, single phase. Deren-

dinger und Schmidli (importer, dist.), Freiburgerstrasse 574, 3172 Niederwangen. WTD 12/70.

36240—PORTUGAL — Carbon resistance ±1% tolerance, for use in measurers. Frapil Construcoes e Montagens Electricas, S.A.R.L. (mfr.), Cais de S. Roque, Apartado No. 20, Aveiro. WTD 7/70.

36292 — IVORY COAST — Wind mills mounted on metal towers to supply electrical power to charge batteries meant to furnish electricity for television sets in villages throughout Ivory Coast; perhaps West African countries. Correspondence requested in French. Societe de Telecommunications Africaines (importer), Boite Postale 6182, Abidjan. WTD in prep.

Household appliances

36312—GERMANY—Barbecue, garden, camping grills. Hausrat-Import GmbH (importer, agent), 10 Ohmstrasse, D-7100 Heilbronn. WTD 9/70.

Electric lighting, wiring equipment

36426—PERU—Decorative under water lights for home type water fountains. Neves S. A., J. & W. (importer, dist.), La Ribera 675, Chucuito, Callao, P.O. Box 1466, Lima. WTD in prep.

Radio, television receiving sets

36510—BRAZIL—Tape recorders, record players, amplifiers, etc., accessories. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

Communication equipment

36626—ITALY—Ultrasonic liquid and gas hydrocarbon measuring, detecting equipment, including instruments for detecting petroleum product type at pipeline terminals. Petrol, S.r.l. (importer, agent, engineering), Via Casilina 567, 00177 Rome. WTD 3/71.

Electronic components, accessories

36720—SINGAPORE—Television camera tubes. E. F. Harwood, Gen. Mgr., Assoc. Instrument Manufacturers (Singapore) Pte. Ltd. (importer, dist., agent), 36 Kallang Place, Kallang Basin Industrial Estate, Killiney Rd., P.O. Box 63, Singapore 12. WTD 3/71.

36730—SINGAPORE—Transmitting and industrial radar valves, tubes. E. F. Harwood, Gen. Mgr., Assoc. Instrument Manufacturers (Singapore) Pte. Ltd. (importer, dist., agent), 36 Kallang Place, Kallang Basin Industrial Estate, P.O Box 63, Killiney Rd. P.O., Singapore 12. WTD

36740 — ITALY — Zener diodes, power transistors. IFTA-International Foreign Trading Agency (dist.), Via Stendhal 67, 20144 Milan. WTD 9/70.

36740—PORTUGAL — Special semiconductors for use in measuring instruments. Frapil Construcoes e Montagens Electricas, S.A.R.L. (mfr.), Cais de S. Roque, Apartado No. 20, Aveiro. WTD 7/70.

36790—ITALY—Integrated circuits, electrolytic and ceramic condensers. IFTA-International Foreign Trading Agency (dist.), Via Stendhal 67, 20144 Milan. WTD 9/70.

Motor vehicles, equipment

37141 — NETHERLANDS — Automotive spare parts, accessories. Exclusive rep. for Netherlands or Benelux countries. Rosier-Rosam N.V. (importer, dist., agent), 20 Textielweg, Amersfoort. WTD 3/71.

Aircraft, parts

37212—VENEZUELA — Helicopters. Industria Aero Agricola C.A. (I.A.A.C.A.) (air services), Aeropuerto de Barinas, Barinas, Estado Barinas. WTD 3/71.

37213 — VENEZUELA — Complete aircrafts for cargo, passenger transportation. Industria Aero Agricola C.A. (I.A.A.C.A.) (air services), Aeropuerto de Barinas, Barinas, Estado Barinas. WTD 3/71.

37224 — SWITZERLAND — Replacement parts, accessories for all kinds of military aircraft engines. Direct purchase and agency. Candia S.a.r.l., Attention: Nicolas E. Zygomalas (distributor, agent), 22, Ave. d'Echellens, 1004 Lausanne. WTD in prep.

Instruments for measuring, controlling, indicating physical characteristics

38212—SINGAPORE—PH meters. E. F. Harwood, Gen. Mgr., Assoc. Instrument Manufacturers (Singapore) Pte. Ltd. (importer, dist., agent), 36 Kallang Place, Kallang Basin Industrial Estate, Killiney Rd., Post Office Box 63, Singapore 12. WTD 3/71.

38216—BRAZIL—Mechanical measuring instruments, dimensional, all usual industrial types, made only in U.S. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

Surgical, medical, dental instruments

38410—AUSTRIA—Hypodermic syringes, disposable; other doctor's supplies excluding furniture. Reazent Allgemeine Handelsgesellschaft mbH (importer, dist., agent), Martinstrasse 5, A-1180 Vienna. WTD 9/70.

38423 — FRANCE — Protective clothing. Intrama (dist., mfr.), 12 Passage Courat, 75-Paris 20e. WTD in prep.

38430—GERMANY—Rubber wheels and points, cut-off wheels, waxes, plastic patterns, other dental materials. E. & H. Renfert (importer, dist., mfr.), 6 Weiherstrasse, P.O. Box 724, D-7700 Singen/Hohenwiel, Baden-Wuerttemberg. WTD 3/71.

Photographic equipment, supplies

38610—BRAZIL—Eight mm., 16 mm. and 35 mm. cameras, projectors. Direct purchase & agency. Importecnica S.A. Comercial e Importadora (dist., agent, retailer), Rua Florencio de Abreu 354, 1° andar, Sala 103, Caixa Postal 30601, Sao Paulo, SP. WTD 3/71.

38617—AUSTRIA—Photocopy paper. Direct purchase and agency. Correspondence requested in German. Georg Burda, Import-Export Vertriebsgesellschaft (importer, dist., retailer), Radetzkystrasse 11, A-1030 Vienna. WTD in prep.

Jewelry, silverware, plated ware

39141 — CYPRUS — Silverware, plated ware, stainless steel ware including knives, forks, spoons, carving sets made wholly of metal. Quote c.i.f. Cyprus. Direct purchase and agency. Savvas Ch. Kafassakis & Son (importer, dist., retailer), 76-78 Hermes St., Nicosia. WTD 3/71.

Toys, amusement, sporting goods

39410 — AUSTRIA — Games, materials, gadgetry for hobbyists. Direct purchase and agency. Peter A. Holub (importer, dist., agent), Wiedner Hauptstrasse 23-25, A-1040 Vienna. WTD in prep.

39493 — GERMANY — Camping equipment, utensils. Hausrat-Import GmbH (importer, agent), 10 Ohmstrasse, 7100 Heilbronn. WTD 9/70.

39493 — ITALY — Tennis rackets, new types. Eurosport (importer, retailer), Viale Europa 86-92, 00144 Rome. WTD in prep.

Pens, pencils, office, artists' materials

39510—FRANCE—Pencils: electric. INTRAMA (dist., mfr.), 12, Passage Courat, 75-Paris 20e. WTD in prep.

Manufacturing industries

39990 — AUSTRIA — Advertising gifts, novelties. Correspondence requested in German. Georg Burda, Import-Export Vertriebsgesellschaft (importer, dist., retailer), Radetzkystrasse 11, A-1030 Vienna. WTD in prep.

39990—AUSTRIA—Small gift items of any material, car accessories. Direct purchase and agency. Peter A. Holub (importer, dist., agent), Wiedner Hauptstrasse 23-25, A-1040 Vienna. WTD in prep.

39999—MALAWI — Men's barber shop fittings, equipment, instruments. T. N. Mahomed (importer, dist., retailer), P.O. Box 5032, Limbe. WTD in prep.

Wholesalers

50930—KOREA—Aluminum power-cable scrap, 99.5% pure or up for reprocessing into power cables; monthly requirement: 300 M/T. Baik Kyu Moon & Co. (importer, dist., agent), I.P.O. Box 3002, Seoul. WTD in prep.

Antique, secondhand stores

59330—PAKISTAN—Used clothing. Requests quotations, c.&f., Karachi. Mohammad Tahir & Bros., (importer), Ranchorepuri Rd., Bhimpura, Karachi. WTD in prep.

Unit At Romania Fair Has 300 Trading Opportunities

American businessmen interested in trade with Romania may contact the Commerce Department concerning 300 inquiries received during the 1970 Bucharest International Fair in which the Commerce Department sponsored a Business Development Office (BDO).

Sales opportunities were recorded for the following categories: electronic components, agricultural equipment, instruments and controls, medical equipment, food processing apparatus, and office machinery.

Contact Christopher Stowell, 202-967-5331, Dept. of Commerce, Rm. 3106, Washington, D.C. 20230.

Other Foreign Official Tenders

HONG KONG—The Hong Kong Telephone Co. issued Tender No. E949/E4/2/RG/K.12A for the supply of mobile automatic telephone exchanges. Bid deadline May 3. Copies of tender announcement and specifications are available from the Hong Kong Telephone Co. Ltd., Tender Supplies Committee, G.P.O. Box 479, Hong Kong, or on a short-term loan to firms located in the U.S. from the Communications Div., Dept. of Commerce, BDC-643, Rm. 4320, Washington, D.C. 20230 ★(202-967-4823).

RWANDA — The Ministry of Public Works and Energy of Rwanda is asking for bids on the construction of 80 km. of asphalted road between Kigali and Gatuna, Uganda. The documents of bid proposals are available from the Embassy of Rwanda, 1714 New Hampshire Ave., NW., Washington, D.C. 20009 (202-232-2882). The documents may be examined or purchased until April 20. The project will be financed by IDA.

TANZANIA—Applications from contractors and manufacturers are invited for prequalification to submit tenders for (a) installation of a single buoy mooring and anchors (to be supplied under a separate contract) for 100,000 Dwt tankers, and the installation of 2,900 meters of 36 inch diameter steel offshore pipeline to link the buoy mooring with the shore; (b) supply and delivery to Dar es Salaam the pipe, all to API standards. Delivery of pipe is required by the end of 1971, and the whole contract is to be completed by August 1972. Apply to: Rendel, Palmer & Tritton, Consulting Engineers, 61 Southwark St., London, S.E. 1, England, with a copy to be sent to: East Africa Harbours Corp., P.O. Box 9184, Dar es Salaam. Firms should secure a copy of the preliminary announcements, available from the Dept. of Commerce, BDC-645, Washington, D.C. 20230 (202-967-3602), and the Department's Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif 94102 (415-556-5864) Deadline is May 2.

TURKEY—The Milli Egitim Bakanligi, Mesleki Ve Teknik Ogretin Mustesarligi, Etgtim Araclari Ve Teknik Isbirligi Genel Mudurlugu, issued a tender for TV studio equipment. Bid deadline is May 5. Bid should offer reverberation equipment, record players, equalizers, filters, echo equipment, microphones, audio test instruments, film printers, film sound synchronizer and studio lighting equipment. Copies of tender announcements and specifications are available only from the Modern Translation Bureau, Karanfil Sokak 49/1 Ankara, for $12.

UNDP Enlists 16 Agencies To Aid Development Drive

The United Nations Development Program (UNDP), with the help of 16 other international agencies, is aiding low-income nations in carrying out investment projects. These programs will cost almost $2.5 billion when complete; about $1.5 billion worth of development work is already finished, with the developing countries paying more than half the cost of the projects.

UNDP investment projects aim at developing national resources, both natural and human, through a sharing of technical knowledge, skills, personnel and facilities.

By announcing large-scale investment projects, the UNDP aids its client nations in attracting capital needed to stimulate and support social and economic advancements, plus assisting those nations in making better use of that capital and their available resources.

By mid-1970, over 1,000 of these pre-investment projects had been undertaken with 200 others about to begin. Each project costs about $2 million, takes four to five years to complete, can engage the services of several international experts, and can require a large inventory of specialized equipment.

UNDP pre-investment projects may be important to a developing country in four major ways:

- Discovering, inventorying and determining the economic potential of natural resources
- Educating and training personnel
- Establishing research centers
- Strengthening national and regional framework for development planning and administration

The Commerce Department offers assistance to U.S. consultants and suppliers by providing advanced information on UNDP projects and providing guidance on UNDP procurement methods. (For a list of 154 UNDP projects, see *Commerce Today*, Feb. 22, p. 50.)

Contact John L. Malone, Business Opportunities Staff, BDC-580, U.S. Department of Commerce, Washington, D.C. 20230.

New Trade Lists

The Bureau of International Commerce has published the following Trade Lists. Copies may be obtained by firms domiciled in the U.S. from the Department of Commerce, BIC-924-TL, Washington, D.C. 20230, and from Commerce Field Offices. The price is $1 per list for each country.

Automated Business Firms

No. — *Title*

00000—Cameroon
Business firms—December 1970

00000—Zambia
Business firms—December 1970

Thailand—Panama

No. — *Title*

01000—Farm, forestry, fishery products; mining companies
20000—Food, kindred products; tobacco products
22000—Textile industry
23000—Apparel, accessories; miscellaneous fabricated textile products, personal leather products
24000—Lumber, wood products; furniture, fixtures
26000—Pulp, paper, paperboard mill products; converted paper, paperboard products; building paper, boards; printing, publishing industries
28000—Chemicals, plastics, related products
29000—Petroleum, petroleum products
30000—Rubber, rubber products; leather, leather products (except footwear, personal leather goods, tires, inner tubes)
32000—Stone, clay, glass products
33000—Primary metals, metal products, ferrous, nonferrous
34000—Fabricated metal products
35000—Machinery, nonelectrical
36000—Electrical machinery, equipment
37000—Transportation equipment, parts, accessories
38000—Professional, scientific instruments, controlling devices; photographic equipment, supplies; watches, clocks; jewelry, silverware, plated ware
39000—Musical instruments; toys, amusements, sporting, athletic goods; office, artists' materials; costume jewelry; novelties, notions; miscellaneous manufactured products

Visiting Buyers And Officials

AUSTRALIA—R. J. Kempnich, R. J. Kempnich & Co., 210 Queen St., Brisbane 4000, **interested in contacting investment firms to participate in city projects, requests technical information.** Apr. 18 via Honolulu until May 15. Itinerary: Apr. 18-19, Honolulu, c/o Parkshore Hotel; Apr. 20-21, San Francisco, c/o Olympic Club; Apr. 22-23, New York, c/o Athletic Club; Apr. 24-May 12, Canada; May 13-15, Los Angeles, c/o Athletic Club. WTD in prep.

BRAZIL—Dr. Arry Hemeterio de Paris, Dir., Companhia Industrial Zornita Equipamentos de Gerencia, Av. Tiradentes 1437, Sao Paulo, SP, **interested in importing U.S. computer peripheral hardware equipment and eventually a joint venture to manufacture this type of equipment in Brazil.** Apr. 21 via San Francisco for over 3 weeks. Itinerary: Apr. 21-26, San Francisco, c/o Saint Francis Hotel; Apr. 27-28, Chicago; Apr. 29-May 5, New York c/o Roosevelt Hotel. WTD 10/70.

LEBANON—Khaluk Musallati, representing Ibrahim M. Khouraji (Platine), Edison Bldg., Bliss St., Beirut, **interested in agencies for U.S. luggage, agricultural seeds and chemicals, army surplus camping equipment.** Apr. 1 via Boston for 1 mo. c/o Adli Qudsi, 1225 18th Ave. E., Seattle, Wash. 98102. Itinerary: Fall River, Mass.; Warren R.I.; New York; Chicago; Denver; Los Angeles; Seattle. WTD 9/70.

PAKISTAN—Sh. Mohammad Iqbal Sandal, Loyal Sports Ltd., Loyal Bldg., Railway Rd., P.O. Box 5, Wazirpura, Sialkot, **interested in exploring market for exporting his firm's products, especially soccer balls, tennis rackets, boxing gloves; interested in selling on agency basis.** Last week April via New York for approx. 2 mos. c/o Harry Gold, 1007 E. Olympic Blvd., Los Angeles, Calif. 90021. Itinerary: New York, cities in California, Illinois. WTD 2/71.

International Business Reports

Tables of Practical Equivalents. **Compiled and edited by Willy Meyer of the International Union of Marine Insurance. $4.95.**

The number of countries represented has been increased to 48 in the third English edition of this publication, which is aimed at bringing out the similarities and differences between principal terms, clauses and conditions of cover used in various countries for the insurance of cargo against the risks of international transport.

By giving corresponding terms which are considered to be commercially equivalent, the brochure is designed to enable traders to have better understanding of the insurance possibilities available to their foreign suppliers and buyers allowing them to give precise instructions to foreign correspondents regarding cover, as well as to properly expedite instructions from foreign customers.

The Tables may also be useful in the opening and paying of documentary credits, by enabling bankers to understand the precise intentions of contracting parties.

Write: International Insurance Monitor, 150 W. 28th St., New York, N.Y. 10001.

France Enters the '70s, Problems and Opportunities for International Firms. **Published by Business International. 1970. 77pp. $60.**

This report describes the present state of the French economy, including such subjects as the government's influence on and intervention in the economy (including tax and credit policies), the labor scene, the capital market, France's relations wtih the Common Market, industrial modernization efforts, foreign investment, regional development, and factors to be considered in selling to and in France. The report has a number of brief case studies showing how particular firms implemented reorganization plans and mergers and instituted various new labor programs.

Write: Business International, 757 Third Avenue, New York, N.Y. 10017.

1971 Official Directory. **Published by the American Textile Machinery Association, Washington, D.C. 74 pp. To members, $3; non-members, $5.**

The first product directory to be issued by ATMA, this illustrated publication covers 64 companies, describing—in English, French, German, and Spanish—the machinery manufactured by each. A product index and a list of association members with their addresses are included.

Write: American Textile Machinery Association, 1730 M St. NW., Washington, D.C. 20036.

Getting Started in Export Trade. **Published by the International Trade Centre UNCTAD/GATT, Geneva. 301 pp. $20.**

Although directed to manufacturers, export agents, and other businessmen mainly in the developing countries, this manual explains for worldwide newcomers to exporting the basic techniques involved in selling abroad. Getting organized, expanding markets, pricing, financing, documentation, marking, packing, and other aspects of the operation are detailed. A list of references on the subjects covered is included.

The manual was edited by the editor of the Canadian Government's fortnightly, *Foreign Trade*, O. Mary Hill.

Write: International Trade Centre UNCTAD/GATT, Palais des Nations, 1211 Geneva 10, Switzerland.

Calendar For World Traders

Apr. 20 — Cincinnati — American Airlines' International Conference on Australia, New Zealand, South Pacific and Caribbean islands, Imperial House Motel, 9 a.m.

Apr. 21-22—Orlando—Tenth Florida World Trade Conference, Robert Meyer Motor Inn, Exposition Park.

Apr. 21-23—San Diego—Western International Trade Group meeting, Vacation Village Hotel.

Apr. 21—Seattle—Export seminar on banking and insurance for exporters, Commerce Field Office, 8021 Federal Office Bldg., 10 a.m.

Apr. 22—Phoenix—Export workshop, Commerce Field Office, 10 a.m.

Apr. 22 — Pittsburgh — Export workshop, Commerce Field Office, 2 p.m.

Apr. 27—Lincoln, Neb.—Seminars on export development (9:30 a.m.) and export documentation (2 p.m.), Chamber of Commerce.

Apr. 27—Memphis—Export workshop, Union Planters National Bank.

Apr. 28—Dallas—Executive seminar on trade promotion and patent/trademark protection, U. of Dallas, 7:30 p.m.

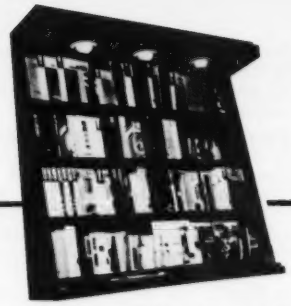
Apr. 29—Fort Smith, Ark.—Export workshop, Ward Hotel.

Apr. 29—Omaha—Seminars on export development (9:30 a.m.) and export documentation (2 p.m.), Federal Bldg. Sponsors: REEC, SBA, Field Office.

Apr. 29 — Pittsburgh — Export luncheon of the World Trade Council, William Penn Hotel, noon.

May 5—Dallas—Executive seminar on trade development and export control policies, U. of Dallas, 7:30 p.m.

May 6-7—New Orleans—26th Mississippi Valley World Trade Conference, Roosevelt Hotel.



New Publications

When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

OFFICE OF THE SECRETARY

Do You Know Your Economic ABC's? Series—U.S. balance of payments. 1970 revision: (March) 1971. 47pp. 35¢. A simplified explanation of our foreign transactions and the role of the dollar in international monetary affairs.

Automotive fuels and air pollution. March 1971. 40pp. 40¢. The final report of the Panel on Automotive Fuels and Air Pollution to the Commerce Technical Advisory Board.

NATIONAL INDUSTRIAL POLLUTION CONTROL COUNCIL

Council report. February. 56pp. 35¢.

The following Sub-Council Reports of the National Industrial Pollution Control are dated March:

Detergents—a status report. 20pp. 20¢. 2nd report.

The engineer's responsibility in environmental pollution control. 24pp. 25¢.

Maintaining vehicular emission control system integrity. 17pp. 20¢.

Paper. 64pp. 40¢.

Plastics in solid waste. 24pp. 25¢.

DOMESTIC AND INTERNATIONAL BUSINESS

BUREAU OF DOMESTIC COMMERCE

U.S. industrial outlook 1971—with projections through 1980. February. 506pp. $5 (included in this price is **The Economy at Midyear,** which will be available in August). This publication presents narrative and statistical analyses on an industry-by-industry basis for both the manufacturing and nonmanufacturing sectors of the U.S. economy.

BUREAU OF INTERNATIONAL COMMERCE

Foreign Economic Trends

Annual subscription, $15 ($6 more for foreign mailing). Single copy 10¢.

Netherlands Antilles (ET 71-011). 8pp.
Morocco (ET 71-012). 12pp.
Central African Rep. (ET 71-013). 10pp.
Brazil (ET 71-014). 12pp.
Germany (ET 71-015). 12pp.
Australia (ET 71-016). 12pp.
Philippines (ET 71-018). 12pp.

International Marketing Information Service

Exhibitor's Export Market Guides

German vacuum and cryogenics market ready for sophisticated U.S. equipment (IMIS 71-003). 4pp. 10¢.

Scandinavian market ripens for U.S. educational, industrial training aids (IMIS 71-005). 8pp. 10¢.

Korea's rapidly growing economy boosts need for more U.S. industrial machinery (IMIS 71-006). 5pp. 10¢.

U.S. suppliers of advanced electronic equipment have fertile field in Japan (IMIS 71-007). 4pp. 10¢.

ECONOMIC AFFAIRS

BUREAU OF THE CENSUS

Bureau of the Census catalog. (March) 1970. 220pp. $1. This catalog is issued on a current basis each quarter and cumulated to the annual volume.

Business conditions digest. Data through February. Series ES1 No. 71-3. Annual subscription, including supplements, $15 ($3.75 more for foreign mailing). Single copy $1.50.

Defense Indicators: March 1971. Series ES4 No. 71-3. Annual subscription $3.50 ($1 more for foreign mailing). Single copy 35¢.

Small-area data notes: February 1971. Vol. 6, No. 2. 8pp. 10¢.

Congressional District Data: Districts of the 92d Congress. These reports present 1970 population and housing data and recent election statistics for districts of the 92d Congress. Reports, at 25¢ apiece, cover **Colorado** (CDD-92-5); **Indiana** (CDD-92-12); **Mississippi** (CDD-92-22); **New Mexico** (CDD-92-28); **Oregon** (CDD-92-34); **South Carolina** (CDD-92-37); **Washington** (CDD-92-43).

Agriculture

Report on cotton ginnings by States: cotton ginned and equivalent 500-pound bales, by States, crops of 1970, 1969, 1968 (A10: 70-12). 1p. 10¢

Construction and Housing

Sales of new one-family homes: January (C25-71-1). Annual subscription (includes monthly, quarterly, and annual reports), $3. Single copy prices: monthly 10¢; quarterly 25¢; annual $1.

Housing authorized by building permits and public contracts: January (C40-71-1). Series C40, Price $11 per year ($2.75 more for foreign mailing). Single copy (annual) $2.75; single copy (monthly) 70¢.

Distribution and Services

Weekly retail sales. Estimated sales of U.S. retail stores, week ending Mar. 20 (CB 71-316). 2pp. 10¢.

Weekly retail sales. Estimated sales of U.S. retail stores, week ending Mar. 27 (CB 71-317). 2pp. 10¢.

Monthly selected services receipts: January 1971. (BS71-1). Annual subscription $1. Single copy 10¢.

Monthly department store sales in selected areas: November 1970 (BD-70-11). Annual subscription $1. Single copy 10¢.

1967 Census of Business

Gasoline service stations and liquefied petroleum (LP) gas dealers (BC67-RS7). 80pp. 70¢.

Foreign Trade

Airborne exports and general imports: January 1971 (FT 986-71-1). Annual subscription $3 (includes FT 900, 975, 985, and 986 combined). Single copy 10¢.

U.S. imports-general consumption, schedule A commodity and country: December 1970 (FT 135). Annual subscription $21 ($5.25 more for foreign mailing). Single copy $1.75.

Export and import merchandise: February 1971 (FT 900-71-1). Annual subscription (FT 900, 975, 985, and 986 combined) $3. Single copy 10¢.

Governments

Finances of employee-retirement systems of State and local governments in 1969-70 (GF70 No. 2). 24pp. 25¢.

Quarterly summary of State and local tax revenue Oct.-Dec. 1970 (GT 70 No. 4). 8pp. 10¢.

Industry

Flour milling products—seasonal adjustment supplement: 1959 to 1970 (Series: M20A Supplement). 15¢ per copy; $1.50 per year.

Inorganic chemicals: 1969 (Series: M28A (69)-14). 15¢ per copy; $1.50 per year.

Selected electronic and associated products: 1969 (Series: MA-36N(69)-1). 25¢.

1967 Census of Mineral Industries

Oklahoma (MIC67(2)-35). 32pp. 40¢.
Tennessee (MIC67(2)-41). 26pp. 35¢.

Population

Household and family characteristics: March 1970 (Series: P-20, No. 218). 91pp. 75¢.

SCIENCE AND TECHNOLOGY

NATIONAL BUREAU OF STANDARDS

The NBS alloy data center: permuted materials index (Spec. Publ. 324). 683pp. $7. This index contains literature references to approximately 10,000 research papers on physical properties of metals and alloys.

Innovative metrology—key to progress (Spec. Publ. 335). 132pp. $1.50. Proceedings of the 1970 Standards Laboratory Conference.

Source listing of OMNITAB II program (Spec. Publ. 339). 371pp. $4.75. OMNITAB II is a general-purpose interpretive computing system designed to allow a nonprogrammer to use a high-speed computer easily, accurately and effectively.

Calibration and test services of the National Bureau of Standards (Spec. Publ. 250—1970 Edition). 226pp. $2.

Technical news bulletin. March 1971. Vol. 55, No. 3. Annual subscription $3 ($1 more for foreign mailing). Single copy 30¢.

Data analysis for isoperibol laser calorimetry (Tech. Note 396). 34pp. 40¢. Isoperibol calorimeters (those operating in a constant-temperature environment) are used to measure the power and energy in laser beams relative to electrical standards.

Tabulated values of cavitation B-factor for helium, H_2, N_2, F_2, O_2, refrigerant 114, and H_2O (Tech. Note 397). 116pp. $1. A brief history is given on the development of the B-factor concept and its application to the design of liquid pumps.

Power and energy measurement of repetitively pulsed lasers (Tech. Note 398). 10pp. The problem of measuring average power, energy per pulse, and peak power of some of the more common repetitively pulsed lasers is discussed.

Lubbock tornado: a survey of building damage in an urban area (Tech. Note 558). 38pp. 50¢. A report on damage to buildings and other structures caused by the tornado which struck Lubbock on May 11, 1970. Illustrated.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Monthly weather review. March 1971. Vol. 99, No. 3. Annual subscription $7.50 ($2 more for foreign mailing). Single copy, 65¢.

NATIONAL TECHNICAL INFORMATION SERVICE

Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Make check or money order payable to National Technical Information Service. Price for each document is $3 (microfiche 95¢) unless otherwise specified.

National drug code directory tape extract (PB-197 560) Feb. 1971 (supersedes PB-194 372), $55, 1 reel. The National drug code directory magnetic tape extract has been updated to include drug product information supplied to the Food and Drug Administration through February 1971 by drug firms cooperating in the implementation of the National Drug Code System. The tape includes information on approximately 23,000 drug products.

Management — a continuing literature survey with indexes (N70-40838). Scientific and Technical Information Div., NSA, Washington, D.C., June 1970, 111pp. Contains selected annotated references to unclassified reports and journal articles entering the NSA and Defense Dept. information systems in 1969.

The economics of fish protein concentrate (PB-197 157). MIT, Cambridge, Mass., for the National Council on Marine Resources and Engineering Development, Nov. 1970, 202pp. Examines the economic feasibility of fish protein concentrate as a nutritional supplement in the diet of a developing country and as a competitive food additive in the United States.

Trends in usage on antimony (PB-197 261). National Academy of Sciences—National Academy of Engineering, Washington, D.C.

Future water demands: the impact of technological change, public policies, and changing market conditions on the water use patterns of selected sectors of the U.S. economy: 1970-90, (PB-197 877). Resources for the Future, Inc., Washington, D.C., for the National Water Commission, 116pp.

Feasibility of a program utilizing railroad cars to bring economic, health, education and social services to rural and neglected populations (PB-197 796). Executive Systems Corp., Washington, D.C. for the Dept. of Transportation, 161pp.

Government-supported research — international affairs (AD-718 800). Dept. of State, Washington, D.C., Jan. 1971, paper copy $3 (microfiche 95¢) 227 pp. Describes current research projects (fiscal year 1970) in the social and behavioral sciences dealing with international affairs, foreign areas, and United States foreign policy.

The U.S. commuter airline industry, its current status and future outlook (AD-718 871). Waldo & Edwards, Inc., Redondo Beach, Calif., for FAA Nov. 1970, paper copy $3 (microfiche 95¢), 50pp. Analyzes current status and future outlook for the air taxi industry from operational, financial, and market standpoints.

Air pollution from road traffic—a review of the present position (PB-196 744). By Road Research Lab of Berkshire, England. 33pp.

Effect of fuel additives on the chemical and physical characteristics of particulate emissions in automotive exhaust (PB-196 783). By Dow Chemical for the National Air Pollution Control Admin. 176pp.

The use of CO and CO_2 lasers to detect pollutants in the atmosphere (AD-717 171). California Institute of Technology for the Air Force. 30pp.

Optimal management of bank reserves (AD-717 569). Center for Naval Analyses. 42pp. Investigates effects of various forces on optimal expansion of credit and holding of reserves. Effects of uncertainty about reserve losses, various types of penalty costs, costs of adjustments, uncertain future interest rates, and various institutional structures under which the bank must operate are discussed.

An approach to standardizing human performance assessment (AD-717 258). By the Human Resources Research Organization, for the U.S. Army. 14pp. Discusses factors in standardizing and evaluating methods of performance assessment, with emphasis on a task classification system and a performance measure, or criterion classification, system.

Industrial psychology in the Seventies and beyond (AD-715 451). By U. of Minnesota for the U.S. Navy. 45pp. Discusses industrial psychology's research models for meeting requirements in future years; issues in future organizations related to trends in the world of work, changes in technology, and new values; and eras of industrial psychology over the last forty years.

Improving the enforcement of driver license denials, suspensions, and revocations. Part I: preliminary guidelines (PB-195 811). By Exotech Systems of Washington, D.C. for the National Highway Safety Bureau. 40pp.

Same title, Part II: technical report (PB-195 812). 122pp.

Measurement of sulfur dioxide in stack gases. Demonstration instrument: design, fabrication and test (NYO-3882-2). Industrial Nucleonics Corp., Columbus, Ohio for the AEC. 110pp. Discusses an instrument that provides a measurement of sulfur dioxide from 100 to 4000 ppm. within an accuracy of 10 percent in a response time of 15 minutes.

Pollution control and management (COM-71-00061). By the New England Regional Commission. 495pp. Paper $6, microfiche 95¢. Reviews and analyzes information on waste generation and disposal. Report covers (1) solid waste management (incineration, landfills, open burning, waste collection, costs, legislation, forecasts, recycling); (2) air pollution management (types, automobiles, power generation, control, sulfur dioxide, nuclear power plants, legislation); and (3) water pollution management (municipal wastes, disposal, costs, control, industrial wastes, paper industry, textile mills, potato processing, fishing, metal industries).

Device for field determination of heavy metals in natural waters (PB-196 665). By U. of Illinois for the Office of Water Resources Research, 53pp.

Public land policy and the environment, Part I: The Legal and administrative framework for environment management of the public lands (PB-196 168). By the Public Land Law Review Commission. 281pp. Focuses on statutory authorities and procedures of the Forest Service, Bureau of Land Management, and National Park Service.

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Isotopic methods of examination and authentication in art and archaeology (ORNL-11C-21). By Oak Ridge National Laboratory for the AEC. 67pp. Discusses thermoluminescence dating of ancient pottery, dating and authenticating works of art by measurement of natural alpha emitters, archaeological dating by the nuclear-track method, radiocarbon dating, radiography, authentication by nondestructive activation analysis, and x-ray fluorescence.

Effective business relocation (PB-196 978). By Univ. of Connecticut (Storrs) for HUD. 320pp. $6 paper, 95¢ microfiche. Guide to workable approaches for relocating businesses displaced by urban renewal.

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World maps of atmospheric radio noise in universal time by numerical mapping (OT/ITSRR 2). 39pp. 40¢. Worldwide atmospheric noise at 1 MHz, as presented in CCIR Report 322 (1963), has been numerically mapped in universal time. The mapping technique and representative contour maps for January and July, 1970, are presented.

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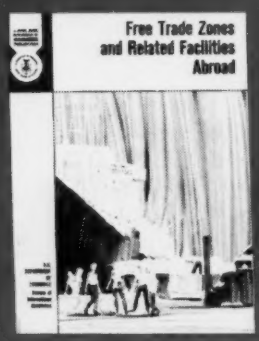

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